SIGNIFICANT CORRELATES OF J & K HIGH SCHOOLS SHOWING CONSISTENTLY ABOVE AND BELOW AVERAGE RESULTS AT THE BOARD'S EXAMINATIONS FOR THE LAST FIVE YEARS

NCERT RESEARCH PROJECT

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FOREWORD

Since the inception of the formal school system, the
evaluation of the work of teachers, administrators and the
school itself has been on the basis of the academic achievement
of students in the board examinations   But the question arises
whether it is the right criteria for evaluating teaching and
learning . This issue has been infringing the minds of
educationists. Another major issue for the educationists has
been to identify the factors in school results in the board
examinations.

Dr.Gupta and Dr.Verma have hit the right nail when they
took up this task to peep into the working of such high schools
which show consistently above and below average results in the
board examinations. They have critically examined this issue
by probing into various aspects of the teaching and learning
processes especially the teaching competency and adjustment of
teachers, organizational pattern, administrative style and
views of heads of these schools. Their findings will be a
light house for all those who are concerned with secondary
education. The study has identified main hurdles and bottle-
necks which have hampered the right type of education in the
schools of a prominent north Indian state of J&K. It has
also tried to suggest some remedial measures for improvement
in the existing working of the schools.

Dr.S.M.Gupta and Dr.Lokesh K. Verma deserve my
congratulations for investigating such an important area.
I am sure this research study will not only become a part
of the library cupboards of NCERT, but will serve as an
important source of information for school functionaries all
over India to improve upon the existing pattern of working
of schools. Their efforts, indeed, has been praiseworthy.

                                          (C.L.KUNDU)

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ACKNOWLEDGEMENTS

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CHAPTER - I

INTRODUCTION

1.1   The Problem:

In the present scientific era, the progress of a nation is dependent upon its educational system. Without a sound and qualitative educational system, the nation cannot move with the fast developing countries. In a country, which is under-developed on the path of all round development and expansion, it is imperative that its resources are utilized to its fullest extent.

Inspite of rapid expansion of education, it is still denied to a large proportion of people, who are capable of it. Apart from the human cost of failure and under-achievement, if a considerable number of children do not benefit fully from education and their achievements are poor, it is obvious that full utilization of the resources is not taking place. The cases of wastage, stagnation and underachievement are costly for a nation. Already faced with alarming rates of wastage and stagnation and problems like mass illiteracy, braindrain, malnutrition and population explosion, no one can afford to overlook the tremendous wastage that result by failure to identify and develop the promising youth to the maximum limits of their creative potential. According to figures available, it has been estimated that of 100 pupils who seek admission in grade-1, only 12 reach grade-10. This means that nearly 88 percent pupils dropout.

At the school, the child spends almost half of his working hours. All the tangible and intangible elements, forces and factors that surround a child in a school situation have effect on the learning environment. This shows that the quality of the school and the instruction imparted therein may also be an important determinant. According to Lister,(1960), "Institutional organisations and institutional climates of

the present day centres of learning leave much to be desired."

Although the performance of students measured in terms of academic achievement is not governed by his intellectual equipment, the interacting influence of home and school has effect on the performance of students. The role played by the institution cannot be underestimated. Any study of institutional environment is likely to throw light on environmental factors which give an institution its entity, its character and its uniqueness, which in turn leaves indelible impact on the personalities, adjustment and behaviour of pupils who study therein. "Just as individuals have different personalities, different institutions have different environments." (Halpin, 1963).

The institutional climate of an institution refers to the academic atmosphere or the learning climate in particular. It is environment in which intellectual, creative and productive powers of the individuals blossom and flower forth to their full. The intellectual climate motivates the students to learn, to work and to make all kinds of concentrated efforts. It possesses the potentiality of stimulating students to develop their power of perception, power of problem solving, analysis, synthesis, conceptual thinking and critical evaluation. It is the institutional climate which inspires the students for independent study and encourages originality and creativity.

The institutional climate embodies in it the interaction of pupils with teachers, teachers with teachers, teachers with the head of the institution and provision of all those facilities or situations which produce better learning.

The importance of institutional climate may be guaged from Walberg's statement that, "Variation in student performance is due mainly to the aptitude of learner and environment of learning."

Sharma, (1971) stated that the climate is one of the important variables which explain difference among the

performance level of schools. So, climate may be pictured as personality sketch of an institution; as personality describes an individual, so climate defines the essence of an institution.

Some efforts have been made in India to study the organisational and administrative structure of schools.

Adaval, et. al. (1957) studied,'The Secondary School libraries in U.P.' He reported that only 14.5 percent of the institutions had provision for separate libraries and reading rooms.

Connor, (1960) concluded that where good classroom climate exists, there are opportunities for students to enhance their academic achievements.

Murthy, (1964) reported that the stock of books, periodicals and refresher material in secondary school libraries in Madras State were quite inadequate and the number of books added annually was very small. Most of the schools did not have qualified librarians. No provision was made in the school/time for library work.

Bakshi,(1965) in a study, 'The State of physical education in Delhi Schools', found that only fortyone of fifty nine boys' and eleven out of thirty one girls' school provided facilities for physico-medical examination.

Eose P.K., Banerjee P.I. and Mukerjee S.P.(1965) in a study, 'Educational facilities available in higher secondary schools of West Bengal, found that:-

1. Library facilities were very poor in many of the schools. In a few schools, whole time librarians were appointed. In some schools, there was no separate library rooms and books were kept inside office room or teacher's common room or head-master's room.

2. In large percentage of schools especially in urban area, there were no playgrounds for the pupils. Physical education programmes were also poorly organised.

3. Regular periodical examinations were not much stressed, nor were they given weightage at the time of promotion to next higher class.

Educational Survey Unit of NCERT(1967), has studied the working of parent - teacher associations in India. It was concluded that parent-teacher associations helped in getting suggesti ns for school improvement.

Gupta,(1967), investigated the problems facing higher secondary schools and observed that school finance was the most burning issue.

Sinha, (1970) observed that only 5% of 1434 schools surveyed have teachers trained in physical and health education

Directorate of Extension Programmes for Secondary Education(DEPSE), found that teachers' qualification, working conditions, location of the school building, equipment, clerical work done by teachers, pupils previous attainment, pupil attendance, examination etc. were factors which were related to pass-fail percentage of schools.

Bose P. ., Banerjee P.K., and Mukerjee S.P.,(1972) in a study,'Primary schools and their teachers in West Bengal', found that –

1. In less than 25 per-cent of rural primary schools, there were separate rooms for different classes.

2. In about 25 per cent of rural schools and 50 per cent of urban schools, separate common room for teachers were provided.

3. In 94 per cent of schools in rural area, no facility for drinking water within the school or near school premises existed.

4. In majority of rural schools, there were no teaching aids.

5. Teachers in schools ranged in their qualifications from those who did not pass their matriculation examination to those who held postgraduate degrees.

6. In rural areas teachers devoted between 4.5 and 5.5 hours a day to school teaching and more teachers in urban areas undertook private coaching than those in rural areas.

Roy and Rath, (1972) have found that school lunch in Orissa attracted higher enrolment in lower primary schools in general and tribal schools in particular.

Ghatge, A.V.,(1973) in a study,'The progress of city Poona Education Department in development of Primary Education' found that lack of proper school building, location of the school in busy and noisy locality, lack of proper sitting arrangement and scarcity of drinking water seriously rampered imparting of education in primary schools.

Karmyogi,R.P.,(1974) in a study, "An investigation to the Problems of Educational Administration in M.P., from 1947 with Reference to Secondary Education', found that there were no provision of administrators in 60 per cent institutions. There were no provisions for moral education in school curriculum; quarterly and half-quarterly examinations were not given direct credit; promotion rules in the schools were incoherent.

Pillai,J.K.,(1974) studied, 'organisational climate, teacher morale and school climate'. He found that both morale and climate were positively and significantly related to both criteria namely pupil performance and innovative ability of the school. Curricular issue, school facilities and rapport among teachers, rapport with principles, teacher work load were found to contribute to pupil performance in schools.

Dekhtawala,P.B.(1977), studied teacher morale in secondary schools of Gujrat. He observed that there was significant relationship between teacher morale and achievement of students.

Rao T.R.S.,(1977) in a problem, 'A study of the class-room climate in secondary schools' found that class-room climate indices correlated positively and significantly with school achievement of pupils.

The school happens to be an important agency of education and it is obligatory on the part of the society to know whether the objectives of education are achieved by school or not. General, personal and social losses in terms of human and physical resources are likely to occur if schools are not subjected to periodical evaluation on scientific lines as to their performance, provisions and expectations. Although emphasis in our country is on expansion of education, yet little attention is devoted for consolidation, follow up and evaluation of institutional climates.

The figures regarding the passed and failed candidates available for the last five years of the Board of School Examination of J & K State are given in the Table 1.1.

TABLE 1.1

NUMBER OF STUDENTS APPEARED, QUALIFIED & FAILED IN THE MATRICULATION EXAMINATION (J&K State)

S.No.	Year	Number of students appeared	Number of students qualified	Number of students failed
1.	1977	23520	13480	10040
2.	1978	23734	8642	15092
3.	1979	22537	12537	10000
4.	1980	28949	12329	16620
5.	1981	31838	14207	17631

If we have a look at the figures, we may conclude that the number of failure students in comparison to the candidates who have passed the said examinations has increased from 1977

to 1981. There may be many factors which contribute to the increase of the failures. On the basis of studies discussed earlier it may be said that 'Institutional climate', is an important factor which contribute to the causes of failures among the students. Keeping these factors in consideration it was thought worthwhile to take the present problem for investigation.

1.2 Statement of the Problem.

The products of universal primary education have overcrowded the high schools. Teachers, however efficient they may be, can not be expected to know every pupil in a crowded class and bestow personal attention on him. In several places, classes are conducted in temporary sheds without any partition between classes, and without an adequate number of benches and desks or a good library or laboratory. Guided reading and self study are practically non-exist ient in many schools.

The lack of full complement of the members of staff during the early months of each academic year is another serious complaint. The strength of the staff is fixed only towards the second academic month. Substitutes are not appointed in several leave vacancies. In many schools, facilities to enable teachers sit to/and work during leisure hours are not provided. This makes preparation for teaching and proper correction of pupils work impossible. No teacher can work efficiently unless the minimum convenience such as at least a teachers' room and a table and a chair for every teacher are made available.

The educational status of the parents and of the other members in the family and in the vicinity, and the occupational status of the parents exercise a direct influence on the aspirations of the children and determine how much guidance and help they can get in their studies. Facilities such as a separate room for study, books and other necessary materials and timely help in the form of private tuition and guidance are often available only with the children of educated and well

to do parents. It may be hypothesized that a school which draws its population mainly from this kind of social background must produce good results. In such schools, if the results are poor who else is to blame except the teacher.

An investigation to find out the factors affecting the achievement of candidates appearing for the matriculation examination of J&K Board is to be taken. The study was undertaken out of felt need. The discontent bred by wastage and stagnation and by the sub-standard quality of those who pass the matriculation examination has been vehemently voiced by politicians and educationists. The cry against falling standards gradually became against teachers, and it was not seldom that they were condemned in public for their inadequate qualification, insufficient work and colossal negligence of duty.

There are not enough authentic data to show that results depend entirely, or atleast largely, on the work of teachers; nor there are any data readily available to show which other factors affect the achievement of pupils.

It is expected that an investigation into organisational and administrative factors which probably affect the achievement of pupils in secondary schools would reveal the inadequacies in the schools, against which teachers feel helpless, as well as inadequacies in respect of the home conditions, interest and inspirations of the students whom they teach. The adjustment and competency of the teachers is also a very vital factor which influence the child in classroom situations. If, above all, these factors do not vitally affect the achievement of pupils at all, the teachers could certainly prevent the large number of failures by putting in more efficient work.

In the light of above considerations, the problem formulated is as such:
SIGNIFICANT CORRELATES OF J&K HIGH SCHOOLS SHOWING CONSISTENTLY ABOVE AND BELOW AVERAGE RESULTS AT THE BOARD EXAMINATION FOR THE LAST FIVE YEARS.

1.3   Significance of study

It is generally observed that results in many schools are badly affected by the lack of facilities for promoting the proper teaching-learning process. The results of the present study throw light on the factors responsible for showing above and below average results consistently for the last five years. The organisational and administrative set up of the schools, teachers adjustment and competency of the teachers are the key and pivotal issues in determining the matriculation result of Board examinations. Every year there is competition and challenge before the schools to maintain higher standards and results. The private and public schools are very much conscious and concerned about their results. The result is the only mirror for exhibiting the type of academic environment. The competency of teachers, their adjustment and allied factors are judged through the type of results attained in every year. When there is a consistency in one or the other type of result, then the institutions are labelled. If the results are consistently good in every year, the signs of good academic and administrative organisation get confirmed otherwise they are dubbed to have poor standards. The presence of facilities causes a social discrimination in the sense that those who can afford to be in a school which shows good results get enriched exposure and orientation conducive for their allround harmonious development which others do not get.

Many/the schools are not coming upto the expectations of common man. This is causing a serious concern to the teachers, administrators/ planners of education. It is, therefore, expected that through a study of this type, necessary modifications in the educational facilities can be planned in the light of results arrived at and feedback can be provided to the teachers and policy planners.

1.4   Objectives of Study:

The following were the objectives of study:

1.   To demarcate and identify the schools showing consistent results above the average pass percentage and below the average pass percentage for the last five years i.e. from 1980 to 1984 in matriculation examination conducted by Board of School Examination J&K State.

2.   To study the views of Heads of selected schools showing consistently above average & below average results.

3.   To study the organisational pattern of the two types of institutions.

4.   To scale the factors responsible for showing consistently above average and below average results as perceived by Heads of both the categories

5.   To compare the significance of differences in the proportions of Heads belonging to schools showing consistently above and below average results.

6.   To study differences in dimensions of adjustment of teachers with respect to sex, locality, economic status, competency of teachers and consistent type of results i.e. above and below average.

7.   To study the first and second order interation between;

   i)   sex and type of results;

   ii)   sex and competency of teachers;

   iii) competency of teachers and type of results;

   iv)   locality and economic status;

   v)   locality and type of results;

   vi)   economic status and type of results;

   vii) sex and competency of teachers and type of results;

   viii) locality and economic status and type of results
         when different areas of teachers adjustment were taken
         as a dependent variable.

8. TO study differences in competency of teachers with respect to experience, qualification, training and consistent type of results,(above average and below average).

9. To study first,and second order interaction between;

   i)   experience and qualification;

  - ii)   experience and consistent type of results;

 iii)   Qualification and type of results;

  iv)   Training and type of results;

  v)   Experience and qualification and type of results;

when competency of teachers was taken as a dependent variable.

10. To find out the relationship between adjustment of teachers and levels of competency of teachers.

1.5   **Hypothesis.**

The following hypothesis were formulated:

1. The factors affecting schools showing above average and below average results may be different.

2. The organisational pattern of both types of schools may be different.

3. There may be significant differences in the proportions
views of
of/Heads of schools showing above and below average results.

4. There may be significant differences in five areas of adjustment of teachers belonging to schools showing above and below average results with respect to sex, locality and economic status of teachers.

5. There may be significant differences in scores of five areas of adjustment of teachers with respect to following combinations of the main effects viz., sex, locality, economic status, competency of teachers and type of schools showing above and below average results.

6. There may be significant differences in competency of teachers with respect to experience, qualification, type of schools , showing above and below average results.

7. There may be significant differences in competency of

teachers with respect to training and type of schools showing above and below average results.

8. There may be significant first and second order interactions in above factors when competency of teachers was taken as a dependent variable.

9. The correlation between scores of teacher adjustment and competency of teachers may come out to be positively high.

1.6   Operational Terms:

Significant:- This word is taken here with respect to usefulness and predominence of factors in schools.

Correlates:- Interrelating variables with reference to result

Above average:-Schools showing the consistent results above the average pass percentage for last five years were taken in this category.

Below average:-The schools showing the consistent results below the average pass percentage for last five years were taken in this category.

1.7   Delimitations:

The coverage of this problem was restricted to the following areas.

1.   All schools showing consistently above and below average results in Jemmu province of J&K could not be taken due to paucity of time, distant location of schools and resources.

2.   Twenty five schools showing above and below average results were only chosen.

3.   The background of the students could not be ascertained in detail.

4.   The study of teacher was limited only towards his adjustment and competency.

5.   The study was restricted to the teachers of four compulsory subjects and having five years of stay in respective schools showing above and below average results.

CHAPTER - II

COLLECTION OF DATA

Data are things we think with. They are the raw material of reflection, until by comparison, combination and evaluation, they are stepped upto the higher level of generalisation, where again they serve as basic material for further and higher thinking.

Factual data obtained from many sources, direct or indirect, is of great significance for the study. Such data can be collected by adopting systematic procedures. Proper methodology, probing tools and well planned test administration go a long way towards collecting data that are relevant and adequate, both quantitatively and qualitatively. The choice of methods fo collecting data depends upon the nature of the problem in hand.

The present piece of research, is a ' school-survey and empirical study. The survey according to recent social science terminology, is an organised attempt to analyse, interpret and report the present status of a social institution group or area. Its purpose is to get groups classified, generalised and interpret data, for the guidance of practice in the immediate future. According to Webestor's New Collegiate Dictionary, 'A survey is critical inspection to provide exact information'. J.B.Sears, of Stanford University is known as father of school survey. The purpose of school survey is to gather a detailed information to be used as a basis for judging the effectiveness of instruction.l facilities, curriculum, teaching and supervisory, personal and financial resources in terms of best practices and standards in education.

This chapter is limited in its coverage to the extent that it includes the discussion of following aspects:

    2.1 Selection of sample

    2.2 Tools Used

    2.3 Administration of tools

2.4   Scoring

2.5   Tabulation of Data

2.6   Proposed statistical techniques.

2.1   Selection of the Sample:

Sampling is fundamental to all statistical methodology of research. It is the part of the strategy of research. Before taking any research problem, it is necessary to plan "sampling design", which is the joint procedure for selection and estimation.

Sampling in educational research means a segment of population, selected from the universe, for the purpose of applying generalization of the study on universe. In every type of data the human beings are mainly concerned — does the phenomena exist? If it exists to what extent does it exist? Due to the vastness of Universe, it is physically impossible for a researcher to take into consideration every individual or phenomenon. For convenience, the researcher selects small segment of population through sampling technique.

Sampling has great utility in research to estimate an accurate guess about population. Sampling is easier, less time consuming and economical to the researcher. He selects a small sample than selecting whole universe for his research study. But the success of sampling depends upon the fact that sample should be true representative of whole population. The sample for the present study is selected from secondary schools and higher secondary schools of Jammu province. The stratified random sampling technique was employed for the selection of the sample.

In the very first phase the researcher collected the year-wise result percentage of matriculation examination of Jammu province of J & K Board for the last five years i.e. from 1980 to 1984. The year-wise result percentage of matriculation examination is shown in Table 2.1.

TABLE 2.1

Year-wise Result Percentage of Matriculation
Examination of Jammu Province of J & K Board
for the last five years:

Year	Result Percentage	Overall percentage of result for last five years
1979-80	56.20	
1980-81	52.10	
1981-82	52.50	52.92 or
1982-83	48.11	53.00
1983-84	49.70	

There were 305 schools which sent their students for appearing in Matriculation Examination of J & K Board in Jammu Province. The pass percentages of 305 schools for five years separately were computed amounting to 1520 percentages.

After this the researcher found the overall pass percentage for the schools in Jammu Province of J&K Board for the last 5 years. The overall percentage came out to be 52.92, which was rounded off to 53% as shown in Table 2.1. This figure of 53% was used in categorizing schools showing consistently above average and below average results. Thus the schools showing more than 53% result continuously for the last 5 years were determined as schools showing good i.e. above average results and the schools showing results below the overall result percentage (53%) for the last 5 years were labelled as schools showing consistently bad i.e. below average results. The list of such schools consisted of 82 schools.

A difficulty before the researcher was that all 82 schools were distantly and widely spread over different parts of each district in Jammu province of J&K which unabled the investigator to visit all the schools personally. Some schools

were in rural locality and some were falling in various urban places of J&K. Further the number of schools in both the categories was unequal. The number of schools showing above average result was 57 out of 82 and rest of 25 schools showed result below average. It was still not possible to visit this wide spread number of schools. The two types of schools showing above average and below average results form two strates out of which further sampling was done. It was however decided that even 25% to 30% as clusters of schools from both the categories if chosen randomly will make the sample representative. So, a systematic procedure was adopted to choose 25% to 30% of the schools randomly from both the categories. In this way, the number of schools chosen for showing consistently good results above the average came out to be 16 and the number of schools showing the results below the average came out to be 9. These 16 and 9 schools are scattered over the various parts of Jammu province in J&K which makes the researcher sure that the sample is deemed to be representative.

Further, the researcher selected only four teachers from each school teaching English, Science, Mathematics and Hindi to X Class students. Thus a sample of 100 teachers teaching X Class was selected from these 25 schools of Jammu province of J&K state for data collection. The names of the schools and number of teachers chosen from each school are shown in Table 2.2

TABLE 2.2

Names of Schools and Number of Teachers selected for data collection.

Sr.No.	Schools showing consistently above average result	No.of teachers selected
1.	Govt.Girls High School,Chenani(Udhampur)	4
2.	Vivek Niketan, Udhampur	4
3.	Govt. Girls High School Gagwal (Hiranagar)	4

Sr.No.	Schools showing consistently above average result	No.of teachers selected
4.	Govt. High School, Sallan (Hiranagar)	4
5.	Govt. High School, Chennaorian (Hiranagar)	4
6.	Jagriti Niketan, kathua	'4
7.	Govt. High School, Lamberi, (Nowshera)	4
8.	Govt. Girls Higher Secondary School, Rajouri	4
9.	Govt. Girls High School, Samba	4
10.	Central Basic School, Jammu	4
11.	Govt. Girls High School, Kachichowni	4
12.	Luthra Academy, Gandhinagar	4
13.	Oriental Academy, Jammu	4
14.	Model Academy, Jammu	4
15.	Govt. High School, Balwal	4
16.	Govt. Girls High School, Bakshinagar	4
	Total	64

Sr.No.	Schools showing consistently below average result	No.of teacher selected
1.	Govt. High School, Barolla (Udhampur)	4
2.	Govt. Higher Secondary School, Reasi	4
3.	Govt. Higher Secondary School, Hiranagar	4
4.	Govt. Higher Secondary School (Boys), Poonch	4
5.	Govt. High School, Soulki (Kalakota)	4
6.	Govt. High School, Muthi (Jammu)	4
7.	Govt. High School, Raipur (Jammu)	4
8.	Govt. Higher Secondary School, Samba	4
9.	Govt. Girls High School, Bedyal Brahemina	4
	Total	36

2.2 Tools Used:

The following tools were used by the investigators:

1. Check list
2. Schedule
3. Questionnaire
4. Pandey's Teacher Adjustment Inventory
5. Baroda General Teacher Competency Scale.

2.2.1 Check-list

A checklist was prepared to assist the investigator for the personal observation. First of all, items on which the information was needed, were determined. The items of the checklist were based on the following aspects.

a. Total number of teachers in the institution

b. Number of trained and untrained teachers

c. Averag work load of the teachers

d. Total experience as well as experience of Head in present institution

e. Location of the institution

f. Pupil transportation

g. Building of the institution

h. Drinking water, electric light, heating and fan facilities

i. Class-rooms

j. Hardwar s

k. School records

l. Teaching Aids.
m. Cocurricular Activities and Moral Education.

The items were arranged in the categories in logical order and related items were grouped together. Certain items had sub-categori s to answer and some had only two options Yes/No.

After preparing the tentative draft of the checklist, it was discussed with the teachers of different institutions selected for the present study and necessary modifications were made in the items of the check-list. A copy of the check-list is enclosed in the Appendix.

2.2.2   <u>Schedule:</u>

Schedule is the name usually applied to a set of questions, which are asked and noted by the interviewer in a face to face situation with another person.

A schedule was prepared by the investigator to collect the required information from the heads of the institution pertaining to the discipline, tr ancy, co-curricular activities, school publications, teaching aids, special classes for the exceptional children, health education, moral education, home work, examination and administrative style of the head of the institution.

Before preparing the schedule, some schedules/ questionnaires already prepared were studied by the investigator. First of all, items which were to be taken in the schedule were determined and questions were prepared for each item. The schedule contained items of the closed form. Certain items were of multiple choice type and some had only yes/no alternatives. At certain places for unanticipated responses, an 'open' category of response was provided with a request 'kindly specify', or 'Any other - please mention'. Oppwortunity was given to the respondents to include supplementary or explanatory information while preparing the schedule.

The items of the schedule were arranged in categories to ensure accurate and easy response. As far as possible, items were so worded that these tie into the respondents present level of information in a meaningful way and items might not constitute a threat to the respondent's ego. It was carefully seen that each item of the schedule deals with a single idea. The items were designed in such a way that would give a complete response and use of double negatives in items was avoided. Items were phrased in such a way that they suit all respondents. The wording of the items was made as far as possible understandable

and familiar in order to ensure the respondents comprehension of what is being asked.

After preparing the schedule, its contents were discussed with colleagues and teachers. Their views were taken and necessary modifications were made. Again, the schedule was shown to the language experts and required improvements were made on the basis of comments given by the language experts. When the tentative draft of the schedule was complete, it was discussed with few teachers of the institutions selected for the present study. Their reactions were noted down and modifications, improvements and additions were made, whenever it was thought necessary. A copy of the schedule is enclosed in Appendix.

2.2.3 Questionnaire:

A questionnaire is a set of questions prepared systematically and logically, which is filled by respondent himself. It is a stimulus which provokes the responses of the individual in relation to certain phenomenon. The questionnaire here consisted of 15 factors affecting results. Directions for the completion of questionnaire were given in the list. This questionnaire was to be filled by Heads/Principals of the institutions. This questionnaire was meant for seeking views of Heads relating to the factors affecting matriculation examination results of J&K Board every year.

For inducing the respondents for compliance to the request of filling the questionnaire, a covering letter couched in a courteous language was accompanied with it. A request was made to the respondents to give necessary information taking care that no item was left unmarked. Again, it was made clear to the respondents that information collected would be kept confidential as it was to be used only for the research purposes. A copy of the questionnaire is enclosed in Appendices.

2.2.4   Pandey's Teacher Adjustment Inventory:

This inventory requires to discriminate between well adjusted and poorly adjusted teachers.   The inventory provides five separate areas of adjustment namely:

Element A   Health Adjustment
Element B   Home & Social Adjustment
Element C   Economic Adjustment
Element D   Institutional Adjustment
Element E   Ethical Adjustment.

The inventory contains 150 items.   There are five sections of the inventory each consisting of 30 items.   Inventory is non-timed, easy to administer and quick to score.   It takes about 50 to 60 minutes to answer all the questions.   It is suitable for use with both sexes.   A high score on this inventory on each adjustment area indicates a superior adjustment while a low score indicates poor adjustment.

For the estimation of reliability of adjustment inventory the scores of 100 teachers were randomly taken from the sample. As the inventory consisted of 5 elements or areas, the reliability was estimated group-wise.   The estimated reliability of each group has been shown in Table 2.3

TABLE 2.3

Area	r
A	.77
	.81
	.86
	.70
E	.66

The reliabilities of the components were needed for composite reliability.   Since, five components instead of two were involved in inventory, the expanded Mosier formula was applied.   The weight assigned to each component was taken to be 1.   After substituting the values in the Mosier formula the

composite reliability came to be .91 which is highly consistent.

Validity:- After the administration of Pandey's teachers adjustment inventory, Asthana's Hindustan Adjustment Inventory was administered to 200 teachers, who were randomly taken from the same sample for the estimation of validity. By applying Pearson's product Moment formula the value came to be .69, which was considered to be valid. This validity coefficient of .69 shows that there exists substantial relationship between two inventories.

Norms: In the process of standardization of a test, the establishment of norms is a very important step. For this purpose raw scores were converted into T-scores. T-scores for each element of inventory for male and female teachers separately were also calculated. Five point scale of norms based on S.D.Units have been prepared on T-scores. Table 2.4 showing norms is given below:

<div align="center">TABLE 2.4</div>

<div align="center">Five point scale of Norms based on S.D.</div>

	Male	Female	Adjustment
A.	337 & above	335 & above	Excellent Adjustment
B.	295 - 335	296 - 334	Good Adjustment
C.	211 - 29	210 - 295	Satisfactory Adjustment
D.	169 - 210	179 - 217	Unsatisfactory Adjustment
E.	Below 169	Below 179	Very unsatisfactory Adjustment

2.2.5 Baroda's General Teaching competency-scale (GTC) :

The GTC scale is generally used for measuring teaching competency of a teacher individually in a classroom situation by a reliable observer or a group of reliable observers making direct observations of his classroom behaviour for the entire teaching period.

There are 1 items related to 21 teaching skills, which

encompass the entire teaching-learning process in the class-
room. They are related to five major aspects of class-room
teaching, namely; Planning, Presentation, Closing, Evaluation
and Managerial. The items are such that they are centred
around teacher class-room behaviour in relation to pupil
behaviour. It is a 7-point rating scale measuring the use of
the skill by the teacher in the class-room corresponding to
each item ranging from '1' for 'not at all to '7' for 'very
much!

Reliability:- Since this is an observation tool, the
appropriate type of reliability is the inter-observer reliability.
This scale has been used for doctoral research (Joshi 1977;
Passi,1977) and the reported inter-observer reliability co-
efficients range from 0.85 to 0.91. Inter-observer reliability
can be better established when the observers train themselves
for using the GTC Scale.

Validity:-

The Scale has content validity since at every stage of
its development discussions were held with educators with
regard to the different teaching skills included and their
behavioural components. This finds further support from the
literature. For listing the teaching skills under each classi-
fication and detailing out their behavioural components, the
major references made were instructional material for various
teaching skills developed by Joshi (1977), Lalita(1977) and
Passi(1977) and book on teaching methods, principles of teaching
and educational psychology.

The scale has factorial validity. This was established
by Rama (1979) in her doctoral study on factorial structure of
teaching competencies, among secondary school teachers. While
developing an observation schedule, she made a list of teacher
behaviour on the basis of behavioural components of the skills
conceptualised by Passi(1976) which constitute the very same

skills as included in the GTC scale. This resulted into 85 verbal and non-verbal behaviours that could be clustered around 15 teaching skills. Table 2.5 gives the teaching skills and their behavioural components included in the inventory.

TABLE 2.5

Distribution of Teacher Behaviour under
the different teaching skills

Sr.No.	Teaching Skills	No. of Teacher Behaviours
1.	Introducing a lesson	4
2.	Fluency in questioning	7
3.	Probing questioning	5
4.	Explaining	8
5.	Stimulus variation	7
6.	Silence and non-verbal clues	5
7.	Pacing and lesson	4
8.	Using audio-visual aids	6
9.	Illustrating with examples	5
10.	Using Blackboard	4
11.	Reinforcement	5
12.	Achieving closure	4
13.	Recognising outstanding behaviour	4
14.	Class-room Management	11
15.	Giving assignments	6
	Total	85

Based on a large number of observations, the observation schedule was revised wherein one of the teaching skills was dropped because of high overlaping. The final form of the schedule consisted of 86 well defined categories. Using the schedule, 23 teachers from the city of Baroda (pilot study) and 130 teachers from the city of Banglore (final study) were observed. It was possible to obtain Scott's co-efficient of

inter-observer validity ranging from 0.78 to 0.82 while observing teachers on the process variables choosen.

2.3 Administration of Tools:

2.3.1 Administration of Checklist, Schedule & Questionnaire:

The investigator first of all sent a request letter to all the heads of selected schools in order to fix up time and convenient date for the administration of tools. Some heads were very generous to reply and some did not bother to do so. Later the investigator visited the institutions personally and tried to establish rapport with the Heads. The investigator administered the various tools to the selected teachers and heads of the institution with a request to give their responses against the items of all the tools separately. The teachers showed keen interest and involvement to go through each item sincerely and carefully. They were explained the purpose and significance of collecting required information from them. It was also made clear to them that the information collected would be kept confidential and utilised for research purposes. Many teachers made a request to the investigator to send them a reply to ensure whether they have proved competent or non-competent. There was some slackness and non-cooperation from some schools where the results were consistently bad. But the investigator managed to get maximum information through personal influence and assess. It was ensured that no item was left unattempted by any teacher or head.

The checklist, schedule and questionnaire were administered to the teachers & head and requisite data was filled.

2.3.2 Administration of Pandey's Teacher Adjustment Inventory:

The investigator distributed adjustment inventories to the teachers and requested them to read carefully the statements contained in the inventory. The investigator also asked teachers to put a mark of Tick (√) against Yes/No for each

statement they think as the most appropriate answer. After the teachers answered all the statements, the researcher collected the inventories for further statistical treatments to reach to conclusions.

2.3.3: Administration of General Teaching Competency Scale:

GTC cale is not administered to the teacher in the way as Adjustment Inventory is administered. Here the investigator himself evaluated the teaching competency of the teacher with the help of GTC scale in the class-room.

As the teachers the investigator sat at the back for observation. At the end of teaching period, he gave ratings on the GTC sc e against all the items. To facilitate this process, the investigator marked frequencies against each item during teach by the teacher which helped him in giving ratings more objectively.

2.4   Scoring Procedure

2.4.1   Scoring of Questionnaire, Schedule and Checklist:

The scoring of the checklist and schedule is different from psychological tests. Here the responses are counted frequency-wise rather than giving marks to the response of each item. The responses of all the tools are counted question-wise.

The scoring of questionnaire is peculiar. The Heads were asked to give 5 marks to the factor he or she likes most and one mark to the factor he or she liked least, for affecting examination results. Similarly, Head of the institution was requested to mark 4,3 and 2 marks to the factors in order of preference.

2.4.2   Scoring of Adjustment Inventory:

For scoring purposes, a punched stencil was prepared for right answers. hile scoring, all answer-sheets were checked and no credit wa given to double marking. The stencil was placed over the swer-sheet and right answers were found out b

counting the number of tick marks ( ) appearing through holes.
The scoring was done area-wise and the scores of each area were
totalled.

2.4.3 Scoring of General Teaching Competency Scale (GTC):

The sum of ratings against all the 21 items constitute
the scores on GTC of the observed teachers. The maximum possible
score is 147 and minimum is 21.

2.5 Tabulation of Data

It consists of categorization of teachers in different
groups. The teachers belong to schools showing:-

    (i)   Consistently above average results

    (ii)   Consistently below average results

in the metriculation examination of J&K Board of School
Education.

After tabulating the scores based on different tests,
the investigator made up groups by computing P_{40} and P_{60} on
different variables viz. adjustment and teaching competency
in class-room.

The calculated value of P_{40} and P_{60} for adjustment came
out to be 103.25 and 112.63 or with roundings taken as 103 and
113. Similarly the calculated values of P_{40} and P_{60} for teaching
competency came out to be 90.4 and 99.5 respectively, which with
roundings can be taken as 90 and 100 respectively. The teachers
whose scores on teacher adjustment inventory were less than the
value of P_{40} i.e. 103 are to be considered as poorly adjusted
teachers and the teachers scoring above the value of P_{60} i.e.
113 are liable to be well adjusted. Similarly, teachers scoring
below the calculated value of P_{40} i.e. 90 on teaching competency
are considered non-competent and the teachers scoring above the
value of P_{60} i.e. 100 are considered competent teachers. Tables

showing calculated value of P_{40} and P_{60} for both the variables
are as under:

TABLE 2.6

Showing values of P_{40} and P_{60} for teachers adjustment

Scores	6'-69,	70-79,	80-89,	90-99,	100-109,	110-119,
f	2	4	8	17	24	16

Scores	12 -129,	130 139,	140-14
f	16	10	3

= Total 100

$P_{40} = 103.25$; $P_{60} = 112.63$

TABLE 2.7

Showing values of P_{40} and P_{60} for Teaching Competency

Scores	20-29,	30-39,	40-49,	50-59,	60-69,	70-79,	80-89
f	1	0	3	3	7	14	10

Scores	90-99,	100-109,	110-119,	120-129
f	2	23	14	3

= Total 100

$P_{40} = 90.4$; $P_{60} = 99.5$

Further, the economic status of teachers is determined
keeping in view their income from all sources. The range of
annual income of teachers is Rs.3000-50,000. The teachers whose
annual income from all sources is below Rs.20,000 are to be
considered as belonging to low economic status and the teachers
whose annual income is more than 20,000 are to be placed in the
category of teachers belonging to high economic status.

The range of teaching experience of teachers varies
from 2 to 15 years. The teachers whose teaching experience is
below 6 years in present school are considered as low experienced
teachers, whereas teachers having more than six years of teaching
experience in the school in which teachers are working are

considered as high experienced teachers. The trained and untrained teachers are decided on the basis of B.Ed. degree. Those who have attained this degree are labelled as trained and simple B.A./B.Sc./M.A./M.Sc. degree holders are untrained teachers.

Thus teachers are categorized as:

1. Competent and non-competent
2. Well adjusted and poorly adjusted
3. Male and Female
4. Urban and Rural
5. Highly experienced and low-experienced. High
6. ∠ Economic Status and low-economic status
7. Trained and untrained.

Number of teachers in each group are listed in the tables 2.8 to 2.13, as under:-

TABLE 2.8

No. of competent and non-comptent teachers in relation to good and bad results

Exam.Result	Teacher	
	Competent	Non-competent
Good	42	12
Bad	4	25

TABLE 2.9

No. of poorly adjusted and well-adjusted teachers with respect to good and bad results:

Exam. Result	Teacher	
	Poorly Adjusted	Well Adjusted
Good	27	32
Bad	12	11

TABLE 2.10

No. of urban and rural teachers in relation
to good and bad results

Exam.Result	Teacher	
	Urban	Rural
Good	43	21
Bad	19	17

TABLE 2.11

No.of high & low experienced teachers
with respect to good & bad results

Exam. Result	Teacher	
	High experienced	Low experienced
Good	18	46
Bad	11	25

TABLE 2.12

No. of High economic status & low economic
status teachers in relation to good
and bad results

Exam.Results	Teacher	
	HES	LES
Good	19	45
Bad	10	26

TABLE 2.13

No.of Trained and untrained teachers with respect to
good and bad results

Exam.Results	Teacher	
	Trained	Untrained
Good	45	19
Bad	26	10

2.6   Proposed Statistical Techniques

The researcher proposes to make analysis on different types of scores available for further comparisons to draw inferences with the help of statistical techniques. The statistical techniques to be applied in the present problem may be like computation of percentage, Biserial correlation, Incomplete rank order, Critical ratio, Analysis of variance etc. The analysis has been made in the next chapter.

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CHAPTER - III

ANALYSIS OF DATA

The Collected data must be processed and analys-ed to draw the proper inferences. It is worthwhile that data collec-ted should be elicited systematically, classified and tabulated scientifically, intelligently interpreted and rationally concluded. Analysis helps the researcher to develop an alert, flexible and open mind to the project undertaken.

The work of present study is multi-dimensional. One of the objective is to study the organisational pattern of both type of schools i.e. schools showing above average results and the schools showing below average results for the last five years. The data for this aspect is collected through checklist. The second objective is to seek the opinions of Heads of two types of institutions regarding the supervision and administra-tion of the work of the teachers. The views of Heads from both the categories of schools is recorded through schedule. The third related objective is to scale the factors affecting consistent results of each type of the school for the last five years as may be perceived by Heads of the institutions. This information is obtained through a list of questions, contained in the questionnaire. The fourth broad objective is concerned with the study of mean differences in teaching competency and adjustment scores of different types of teachers belonging to schools showing above average and below average results. The fifth objective is to find out the relationship between the adjustment scores of competent and non-competent teachers.

3.1 Statistical Techniques Employed

All the objectives of present study were realised by putting statistical treatment to the collected data. The data i analysed by making use of the following statistical techniques:

1. Calculation of Percentages

2. Calculation of χ^2

3. Calculation of Scale Values through Thurstone's Incomplete Rank order

4. Critical Ratio

5. Analysis of variance

6. Biserial Correlation.

Percentages and χ^2 (chi square)

The whole work is divided into five sections. The first and second section is related to the calculation of percentages and χ^2 for the data collected through checklist and schedule. These two calculations are made on the frequencies and counts. The techniques are non-parametric and are related to nominal level of measurement where the information to be analysed is either categorised or classified into more than one type. These techniques are applied herefor the data collected through checklist and schedule.

Thurstone's Incomplete Rank Order

The third section deals with the application of Thurstone's Incomplete Rank order to scale the factors responsible for affecting the matriculation results within two types of the schools. Thurstone explained that there are some practical situations in which stimuli may be large. Under such experimental situations, the researcher is advised to select best five or ten objects and rank only those which are selected. In the present investigation, the researcher employed this technique for deriving the scale values as the number of stimuli were 15. There are two groups involved in the present investigation. The complete statistical process for each group has been discussed separately in the third section of the analysis of data.

Critical Ratio

The critical ratio was applied to find out differences in the proportions of the heads belonging to two different types of school groups.

Analysis of Variance

The analysis of variance is applied in fourth section. Analysis of variance is nothing but an economical method for testing significant differences between means of two or more groups. As "t" test is useful in testing the significance of means of two groups, Anova is used for testing the significance of mean differences among two or more than two groups. Moreover as computations of a large number of "t" ratios would involve more time and energy to meet these situations, Fisher introduced analysis of variance. The investigator also selected the same technique to meet these situations in order to arrive at suitable conclusions.

Advantages of Analysis of Variance

The following are the major advantages of ANOVA :-

1.   The possible significance of mean differences can be analysed by an over-all test of significance, when there are many results to be compared. The use of ANOVA involves less risk of "alpha-error" i.e. when we reject the null hypothesis at small variance value to be significant at 0.05 level of significance.

2.   Another advantage arises in the use of factorial design. The factorial experiment has a number of merits. It is convenient in two ways:

   (a)   It brings to the mind a summary of a mass of statistical data in which the logical content of the whole is really appreciated.

   (b)   Apart from aiding in the logical process, it is convenient in facilitating and reducing to a

common form all the tests of significance which we want to apply.

3.   The third advantage of analysis of variance arises in the use of a randomized block design. This method tends to lessen the risk of type II error i.e. failing to reject the null hypothesis. This is the case because the estimate of sampling error is usually smaller, when the variance associated with the differences among the means of the block have been estimated from it. The advantage, thus makes an increase in the power of the test variance ratio "F" and it increases the possibility of rejection of a false null hypothesis.

Biserial-Correlation

The researcher has employed biserial correlation in order to study the relation between competency of teachers and their adjustment scores in section fifth.

Section I : Analysis of Checklist Responses:

The first objective of the study was realised by obtaining frequency counts of various categories of the various items of the checklist which were converted into percentages, wherever it was thought necessary. Sometimes, average of responses was found out. The analysis of the results and their interpretation are discussed as under:

The information regarding the total number of teachers, number of trained teachers and untrained teachers was gathered through items, 1,2 and 3 of the checklist. The results are, summarised in the tables 3.1 & 3.2.

Category A means schools showing consistently above average results and category B means schools showing consistently below average results for last five years in matriculation examination of J & K Board of School Education.

TABLE 3.1

Number of Total and Untrained Teachers in both categories
of schools

Category	Average number of Teachers	Percentage of untrained teachers
A	24	18
B	21	12

TABLE 3.2

Percentage of various categories of
Teachers

Category	B.A.B.Ed.	B.A. M.Ed.	B.Sc.B.Ed.	M.A. B.Ed.	M.A.M.Ed.	L.T.	Shastri	Drawing Teacher	P.T.I.	Others
A	51	7	7	17	3	2	2	2	6	3
B	54	2	6	15	3	1	3	5	5	6

INTERPRETATION

Average number of teachers in the institutions of the category A is 24, whereas average number of teachers in the institutions of categories B is 21. Out of total number of teachers in the institutions of the category A, 18 per cent are untrained whereas 12 per cent teachers are untrained in the institutions of the category B.

Out of total number of trained teachers in the institutions of the category A, 51 per cent are B.A.B.Eds; 7 per cent are B.Sc.P.Eds; 7 per cent are B.A.M.Eds; 17 per cent are M.A.B.Eds; 3 per cent are M.A.M.Eds; 2 per cent are L.Ts; 2 per cent are Shastris; 2 per cent are drawing teachers; 6 per cent P.T.Is and 3 per cent are others whereas out of total number of trained teachers in the institutions of the category B, 54 per cent are B.A.B.Eds; 6 per cent are B.Sc.B.Eds; 2 per cent are B.A.M.Eds; 15 per cent are M.A.B.Eds; 3 per cent are M.A.M.Eds; 1 per cent are L.Ts; 3 per cent are Shastris; 5 per cent are drawing teachers; 5 per cent are P.T.Is and 6 per cent are others.

2. The information regarding 'Average work load of teachers' was collected though item No.4 of the checklist. The findings are generalized as under in Table 3.3.

TABLE 3.3

AVERAGE WORK LOAD OF TEACHERS

Category	Average work load of Teachers per day
A	5 periods
B	6 periods

INTERPRETATION

Average work load of all teachers in the institutions of the category A is 5 periods per day whereas average work load of all teachers belonging to institutions of the category B is 6 periods per day.

3.   The information regarding the experience of the head of the institution, was collected through items 5 and 6 of the check-list. The findings are summarized as under in Table 4.

TABLE 3.4

EXPERIENCE OF THE HEADS

Category	Average total experience of the heads in years	Average experience of the heads in present institutions in years
A	26	5
B	28	3

INTERPRETATION

Average total experience of the heads in the institutions of the category A is 26 years whereas average total experience of the heads in the institutions of the category B is 28 years. Average experience of the heads in the institutions in which they are serving at present belonging to the category A, is 5 years, whereas average experience of the heads in the institutions in which they are serving at present belonging to category B is 3 years.

4.   The information regarding 'location of the institution' was collected through item No.7, of the checklist. The results are tabulated in table 3.5 as under:

TABLE 3.5

LOCATION OF THE INSTITUTION

Category	Percentage of institutions situation			
	In Urban area	InRUral area	In the main market	On the road side
A	65	35	35	65
B	23	77	28	72

INTERPRETATION

65 per cent institutions of the category A are situated in the urban area and 35 per cent in rural area. 35 per cent institutions of this category are situated in the main markets and 65 per cent on the road side. On the other side 23 per cent institutions of the category B are situated in urban area, 77 per cent are in rural area. Further 28 per cent institutions of this category are situated in the main market and 72 per cent institutions are situated on the road side.

5. The information regarding the maximum distance which the students have to cover to reach the institution and means of transportation from their home to the institution were collected through items 8,9,10,11, and 12 of the checklist. The results are summarised as under in Table 3.6.

TABLE 3.6

DISTANCE AND TRANSPORTATION FACILITIES

Category	Average distance students have to cover to reach the institution	Percentage of institutions	
		Providing school bus facility	Local bus facility
A	8 Kms.	4	84
B	12 Kms.	-	75

INTERPRETATION

The average distance, which students of the institution of the category A, have to cover is 8 kms; 4 per cent institutions of this category provide school bus facility. Further more 84% students of this category can also avail themselves of the local bus facility. Average distance covered by students of category B is 12 Kms. 75% students avail of local bus facility with no school bus facility.

6. The information regarding the building of the institution was collected through items 14,15,16 & 17 of the checklist.

The information collected is tabulated in Tab.. 3.7.

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TABLE 3.7

TYPE OF THE BUILDING OF THE SCHOOL

Category	Percentage of institutions having					
	Pucca build- ing	Kacha build- ing	Mixed type building	Sheds	Planned buil- ding	Class- rooms Lab,off'c situated at one pl'c
A	82	—	18	--	87	75
B	75	—	25	—	53	50

INTERPRETATION

82 per cent institutions of the category 1 have pucca building and 18 per cent have mixed typ ' building. No institution of either category have kacha c 'ed type of buil ding. 87 per cent institutions of the category A have planne' building and 7' per cent institutions have class room-, labora. tories and office situated at one place and remaining 12 per cent institutions have building divided into parts. In category B,75 per cent institutions have pucca buildings and 25 per cent have mixed typ: building. 53 per cent institutions of the category B have planned building, out of which 50 per cent institutions have classrooms, laboratory and office situated at one place and 3 per cent institutions have building divided into two parts

7. The information regarding availability of dispensary, library, laboratory, science-room, staff-room, auditorium, stud' hall, room for manual work, garden, cantoon, play-ground and common room was collected through item No.18 of the checklist. The findings are summarised in Table 3.8.

TABLE 3.8

PHYSICAL FACILITIES IN THE INSTITUTION

Category	Dispensary	Library	Laboratory	Science room	Staff room	Auditorium hall	Study hall	Craft room	Garden	Canteen	Play ground	Common room	Lavatory
A	18	100	100	82	78	18	23	23	18	35	65	23	82
B	-	70	94	78	70	-	12	12	25	25	78	25	64

INTERPRETATION

100 per cent institutions of category A, have library and laboratory, 82 per cent institutions have science room, 78 per cent have staffroom, 18 per cent have auditorium, 23 per cent institutions have study hall and craftroom, 18 per cent have garden, 35 per cent have canteen, 65 per cent have playground, 23 per cent have commonroom and 32 per cent institutions have lavatory. On the other hand, institutions of the category B have no dispensary facility, 70 per cent institutions have library and staffroom facility, 94 percent have laboratory, 78 per cent have science room and play-ground, 12 per cent have study hall and craft room, 25 per cent have garden, canteen and common room and 60 per cent institutions of the category have lavatory.

8. The information regarding the separate office for the head and the clerk, was collected through No. 19 of the checklist. The results are tabulated as under in Table 3.9.

- -

TABLE 3.

OFFICES IN THE INSTITUTION

Category	Percentage of institution which have separate office for the	
	Head	Clerk
A	100	76
B	100	67

- -

INTERPRETATION

100 per cent institutions of the Category A, have office for the heads and 76 per cent for the clerk. Again 100, institutions of the category B have office for the head but only 67 per cent have office for the clerks

9. The information regarding the white-washing the school building was collected through items 20 and 21 of the checklist. The results are summarized as under in Table 3.10.

TABLE 3.10

WHITEWASHING IN THE INSTITUTION

Category	Percentage of Institution where School building is white washed	Frequency of white washing		
		half-year	Year	Not fixed
A	100	—	63	37
B	100	—	66	34

INTERPRETATION

100 percent institutions of both the categories have provision of white-washing the school building. 63 per cent institutions of the category A, get their buildings annually white-washed and the period of white washing of the building of 37 per cent institutions is not fixed. The building of 66 per cent institutions of the category B is white washed annually and the period of whitewashing of 34 per cent institutions is not fixed.

10. The information regarding drinking water facility in the institution was collected through item 22 and 23 of the checklist. The results are summarised as under in Table 3.11.

TABLE 3.11

DRINKING WATER FACILITIES

Category	Percentage of institution which provide drinking water facility	Mode of drinking facility			
		Coolers	Pitchers	Tanks	Water taps
A	100	—	—	56	44
B	100	—	—	50	50

INTERPRETATION

100 per cent institutions of both the categories A & B provide drinking water facility. In the institution of the category A 56% institutions provide this facility by tanks and 44 per cent by water taps whereas 50% institutions of the Category B provide drinking water facility by tanks and 50 per cent by water taps. No institution of the either category provides drinking water facility by cooler and pitchers.

11. The information regarding electric lighting arrangement was collected through items 24 and 25 of the check-list. The results are summarized as under in Table 3.12.

- -

TABLE 3.12

ELECTRIC LIGHTING ARRANGEMENT

| Category | Percentage of institutions which have | | | |
| | Electric lighting arrangement | Electric lighting arrangement in | | |
		Clerk's Office	Head's Office	Every classroom
A	87	8ᵇ	87	50
B	75	62	7'	13

- -

INTERPRETATION

87 per cent institutions of the category A have electric lighting arrangement. This arrangement exists in Clerk's as well as in head's office but only 50 per cent institutions of this category have electric arrangement for every class-room whereas 75 per cent institutions of the category B have electric arrangement and all have this arrangement in head's office. 62 per cent institutions have electric arrangement in clerk's office but only 13 per cent of institution of this category have electric arrangement in every class-room.

12.   The information regarding heating arrangement in winter was collected through items 26 and 27 of the Checklist. The results are summarized as under in table 3.13.

TABLE 3.13

HEATING ARRANGEMENTS

Category	Percentage of Institutions which have				
	Heating Facility in winter	Mode of heating facility by			
		Electric Heater	Hot Convectors	Firewood	Coal
A.	56	31	-	-	25
B	38	25	-	-	13

INTERPRETATION

56 per cent institutions of the Category A have heating arrangement in winter out of which 31 per cent get it through electric heaters and 25 per cent through coal. Only 38 per cent institutions of the Category B have heating arrangement, out of which 25 per cent have this arrangement through electric heaters and 13 per cent through coal.

13.   The information regarding fan facility was collected through items 28 & 29 of the checklist. The results are summarized as under in Table 3.14.

TABLE 3.14

FAN FACILITY

Category	Percentage of institutions which have	
	Fan facility during summer	Fan facility in every room
A.	87	31
B	75	13

INTERPRETATION

87 per cent institutions of the Category A provide fan facility in summer and 31 per cent institutions provide this facility in every room whereas 75 per cent institutions of the category B have fan facility in summer and 13 per cent institutions of this category provide fan facility in every room.

14. The information regarding classrooms and sections was collected through items 30, 31 and 38. The results are tabulated as under in table 3.15.

- -

TABLE 3.15

CLASS-ROOMS

Category	Average number of class-rooms	Average size of class-rooms	Percentage of institutions in which classrooms are ventilated
A	17	18'x16'	87
B	21	19'x19'	75

- -

INTERPRETATION

Average number of class-rooms in the institutions of the Category A is 17 which are with an average size of 18'x16', whereas the average number of class-rooms of the Category B is 21 with an average size of 19'x19'. It may further be mentione that 87 per cent institutions of the category A have satisfactory ventilation, whereas Category B has ventilation only in 75 per cent institutions.

15. The information regarding the provision of making sections was collected through items 32 to 37 of the check-list. The results are summarised as under in Table 3.16 & 3.17.

TABLE 3.16

PROVISION OF MAKING SECTIONS

Category	Percentage of Institutions in which Classes are divided into sections	Classes are segregated on the basis of				
		Merit	Sex	Chronological Age	Randomly	Alternatively
A	88	13	6	–	69	–
B	75	25	–	–	50	–

TABLE 3.17

NUMBER OF STUDENTS SECTIONWISE AND PROVISION OF SEPARATE ROOM FOR EACH SECTION

Category	Average number of sections made of a class	Average number of students in one section	Percentage of institutions in which classes are held in			
			Seperate rooms	Halls	Verandha	Open space
A	3	52	82	6	6	6
B	2	56	38	12	12	38

INTERPRETATION

In 88 per cent institutions of the Category A and 75 per cent institutions of the Category B classes are divided into sections. 13 per cent institutions of the category A divide classes on the basis of merit, 6 per cent on the basis of sex and 69 per cent institution of this category segregate classes randomly. 25 per cent institutions of the Category B make sections on the basis of merit and 50 per cent divide classes randomly.

Average number of sections made of a class in the institutions of the Category A is 3 and average number of students in one section is 52. On the other hand in the institutions of the category B, the average number of sections made of a class is 2 with average number of 56 students in one

section. In 82 per cent institutions of the category A, every section has got a separate room and in 18 per cent institution of this category classes are conducted in hall (6%), Veranda(6%), and in open (6%), whereas in only 38 per cent institutions of the category B every section has got a separate room and 12 per cent institutions of this category conduct classes in hall, 12 per cent in Verandah and 38 per cent institutions in open.

16. The information regarding facility of hardwares in the institutions was collected through items 39 to 47. The results are summarized as under in Tables 3.18 & 3.19.

TABLE 3.18

HARDWARES

Percentage of Institutions which have

Category	Notice Board	Black Board	Black Boards	
			Fixed	Movable
A	94	100	75	25
B	87	100	62	38

TABLE 3.19

NUMBER OF CHAIRS AND DESKS

Average Number of

Category	Chairs in the staffroom	Chairs in office	Chairs in each class-room	Desks in a classroom
A	16	15	1	26
B	15	14	1	24

INTERPRETATION

94 per cent of the institutions of the Category A and 87 per cent institutions of the Category B have notice boards.

100 per cent institutions of both categories have black-boards out of which 75 per cent institutions of the category A have fixed black-board and 25 per cent have a movable black-boards whereas 62 per cent institutions in category B have fixed black boards and 38 per cent institutions have movable black-boards.

Average number of chairs in the institutions of the Category A in the staff-room is 16. On the other hand, there are 15 chairs in the staff-room of the institutions of the Category B. The institutions of the category A have 15 chairs in the office whereas there are 14 chairs in the institution of the Category B in the office. The average number of desks in a class-room in the institutions of the Category A is 26 whereas it is 24 in the class-room of the institutions of the Category B.

16. The information regarding maintenance and checking of school records was gathered through items 48, 49 & 50 of the checklist. The results are summarised as under in Tables 3.20, 3.21 and 3.22.

TABLE 3.20

MAINTENANCE OF SCHOOL RECORDS

Percentages of Institutions which have

Category	Register of admission & withdrawal of students	Attendance Register of Students	Register of Teacher Students	A Diary of weekly programmes	A copy of syllabus	A copy of current educational programmes	A copy of progress records of students	Secrecy Books	Punishment Book
A	100	100	100	87	100	100	94	81	56
B	100	100	100	25	100	62	75	60	25

TABLE 3.21

MAINTENANCE OF SCHOOL RECORDS

Percentage of Institutions which have file for each

Category	Account books	staff members	students	file for purchases
A	100	100	19	100
B	100	100	-	70

INTERPRETATION

100 per cent instiutions of the Category A & B have a register of admissin and withdrawal of students, attendance register for students and teachers, account books and file for each staff **member.** **100 per cent** institutions of the Category A have a copy of syllabus and a copy of current educational programmes, 94 per cent institution have a copy of progress record of students, 81 per cent have secrecy books, 56 per cent have punishment books, 19 per cent have file for students and 100 per cent have file for purchases. On the other hand, 100 per cent institutions of the category B have a copy of syllabus, 62 per cent have a copy of current educational programmes, 75 per cent have a copy of record of progress of students, 60 per cent have secrecy books, 25 per cent have punishment books and no institution of this category keeps file for each students. 70 per cent institutions of the Category B have file for purchases.

- -

TABLE 3.22

CHECKING OF SCHOOL RECORDS

Category	Percentage of institutions in which	
	records are complete	records are checked regularly
A	94	87
B	94	75

INTERPRETATION

94 per cent institutions of the category A and B have complete records. In 87 per cent institutions of the category A and 75 per cent institutions of the Category B record are checked regularly.

17. The information regarding teaching aids was collected through items 51,52 and 53 of the checklist. The findings are tabulated as under in Table 3.23:

TABLE 3.23

TEACHING AIDS

Category	Percentage of institutions				
	in which models are used as teaching aids	In which models are in working order	Which have		
			Maps	Globe	Charts
A	95	65	88	100	100
B	87	50	65	100	100

INTERPRETATION.

95 per cent institutions of the Category A and 87 per cent institutions of the Category B use models as teach-aids. All the schools in both the category use charts and globe as teaching aids. In 65 per cent institutions of the Category A, and 50% institutions of the Category B models are working order. 88 per cent institutions of category A and 65 per cent institutions of category B use maps an one of teaching aids.

18. Information regarding cocurricular activities, their frequency, participation of teachers in these activities and prizes to the students was gathered through items 54 to 59 of the checklist. The data has been tabulated in Tables 3.24 to 3.26 as under.

COCURRICULAR ACTIVITIES

Percentage of Institutions which organise

Category	Debate	Declamation contests	Plays	Quiz competition	Music Competition	Dances	Poetic symposium	Sympo- sium competition	Painting competition	Athletics	Science fairs
A	100	–	80	20	20	80	–	20	80	80	100
B	80	–	80	20	–	40	–	20	60	80	60

TABLE 3.25

FREQUENCY OF ORGANISING COCURRICULAR ACTIVITIES

Percentage of Institutions in which such activities are organised

Category	Weekly	Monthly	Half yearly	On specific days
A	–	40	40	20
B	–	–	60	40

TABLE 3.26.

Participation of Teachers, Rewarding Students and Provision of Library Facility for Cocurricular Activities

Category	Percentage of Teachers take part in Co-curricular activities	Percentage of Students get reward	Institutions in which Rewards are in the form of Prizes	Position of honour is given	Library facility is provided for debates
A	100	60	40	20	80
B	60	20	20	–	60

INTERPRETATION

Table 3.24 reveals that 100 per cent institutions of the Category A organise debates and science fairs, 80 per cent institutions organise plays, dances, painting competitions and athletics, 20 per cent institutions organise music competition, symposium and quiz programmes, whereas 80 per cent institution, of the Category B, organise debates, plays and athletics, 60 per cent institutions organise painting competitions and science fairs, 40 per cent institutions organise dances and 20 per cent institutions organise symposium and plays. No institution under study of the category A or B, organise declamation and poetic symposiums.

Table 3.25 shows that 40 per cent institutions of the Category A organise such activities monthly, 40 per cent organise half yearly, 20 per cent institutions organise such activities on specific days, whereas in Category B, 60 per cent organise such activities half yearly and 40 per cent on some specific days. No institution under study of the Category A or B organise such activities weekly.

Table 3.26 shows that in 100 per cent institutions of the Category A teachers take part in such activities. On the other hand in 60 per cent institutions of the Category B teachers take part in such activities. In 60 per cent institutions of the Category A, students get rewards out of which in 40 per cent institutions prizes are given and in 20 per cent institutions position of honours is given to the students, whereas/ 20 per cent institutions of the Category B, students
ⁱⁿ
get rewards in the form of prizes. 80 per cent institutions the Category A provide library facility for debates, whereas 60 per cent institutions of the Category B provide library facility for debates.[19) Information regarding provision of education
/collected through the items 60 to 64 of checklist has been
organised in Table 3.26.

TABLE 3.27

PROVISION OF MORAL EDUCATION

Category	Provision of giving moral education	Moral education is given in ---			Moral education is given by ---			Students participation in moral education lessons	Moral education given is effective
		Morning Assembly	Class rooms meetings	General House Meetings	The Head	Teacher in rotation	Some outsider		
A	100	100	-	-	60	20	20	80	100
B	80	60	20	-	1	40	40	80	80

INTERPRETATION :- 100 percent institutions of the Category A have provision of giving moral education to students. In all these institutions moral education lessons are given in morning assembly. These lessons are given in the teachers in 20 per cent institutions, by the head of the institution in 60 per cent institutions and by some outsider in 20 per cent institutions. On the other hand, 80 per cent institutions of the Category B have provisions for providing moral education to the students. In 60 per cent institutions of these categories, moral education lessons are given in morning assembly and in 20 per cent institutions these are given in the class-rooms. As knowledge is given by the head in 40 per cent and by teachers in 40 per cent institutions in respect of 40 per cent institutions.

In 80 per cent institutions of the category A and this is the case in all institutions of the category B .... [illegible] .... education given is effective. This information regarding effectiveness of education .... [illegible] .... checked .... the data have been recorded in Table ....

TABLE 3.28

CELEBRATION OF IMPORTANT DAYS

Percentage of institutions which celebrate following days:

Category	U.N.O. Day	Republic day	Independence day	Teacher's day	Children's day	W.H.O. day	Sports day	Flag day	Mother's day
A	-	100	-	40	100	-	60	40	100
B	-	100	-	-	60	-	-	-	60

INTERPRETATION :- 100 per cent institutions of the Category A celebrate the Republic day, children's day 50 per cent institutions of this Category celebrate sports day and 40 per cent institutions and Mother's day. 100 per cent institutions of the Category B celebrate tions celebrate Teacher's day and Flag day, whereas 100 per cent institutions of the Category B celebrate the Republic day and 60 per cent institutions celebrate th children's day and mother's day, no institutions of the category A or B celebrate W.H.O. day celebrated the Independence day also not celebrated due to summer break.

Section-II :   Analysis of Schedule Responses regarding
                Administrative Style of Heads of Schools.

The information regarding administrative style of the
head of the institution was collected through the schedule.
The response against each item were counted and tabulated
in a 2 x 2 contingency table. X^2 of independence was
calculated to test the significance of difference in the
administrative styles of the heads of the schools showing
consistently above average results (category A) and below
average results (category B). Responses were categorized y r/
The formula applied and procedure adopted is shown as such:

<table>
<tr><td></td><td colspan="2">Responses</td><td></td></tr>
<tr><td>Category</td><td>Yes</td><td>No</td><td>Total</td></tr>
<tr><td>A</td><td>(a)</td><td>(b)</td><td>a + b</td></tr>
<tr><td>B</td><td>(c)</td><td>(d)</td><td>c + d</td></tr>
<tr><td></td><td>(a + c)</td><td>(b + d)</td><td>N</td></tr>
</table>

$$X^2 = \frac{N\left[|ad - bc| - \frac{N}{2}\right]^2}{(a+b)\ (c+d)\ (a+c)\ (b+d)}$$

The values for expected frequencies were calculated for
all the items separately. This formula is used when frequencies
are small and df is 1. Yates's correction for continuity has
been applied.

The frequencies against various items and value of X^2
and its significance level is shown in Table 3.29.

TABLE 3.29

RESPONSES OF HEADS REGARDING THEIR ADMINISTRATIVE STYLE

Item	Statement	Category A		Category B		X^2	Signific. at .05
		Yes	No	Yes	No		
1.	Makes ideas clear to the staff	12	∴	9	0	1.13	n.s.
2.	Discusses new ideas with the staff	13	3	8	1	1.14	n.s.
3.	Ask the staff members to follow standard rules and regulations	12	4	9	0	1.13	n.s.
4.	Maintain definite standards of performance	14	2	7	2	0.005	n.s.
5.	See that staff members are working upto full capacity	13	3	8	1	1.14	n.s.
6.	Assign particular task to particular staff member	13	‥	⌐	1	1.14	n.s.
7.	Make personal favour to any of the staff members	3	13	3	6	0.02	n.s.
8.	Find time to listen patiently to the problems of the staff.	13	3	8	1	1.14	n.s.
9.	Take personal interest in the problems of the staff	12	4	8	1	0.12	n.s.
10	Help the staff members to settle minor differences	13	3	7	1	1.14	n.s
11	Work without consulting the staff	2	⌐	⌐	7	0.05	n.s.
12	Make all class scheduling decisions themselves	2	14	0	9	0.05	n.s.
13.	Make sure that their past in the organisation is understood by all staff members	13	3	⸱	1	1.14	n.s.
14.	Daily establish contact almost with all teachers	12	4	9	0	1.13	n.s.
15	Communication between heads and teachers is open, friendly and ᵣm	14	2	7	2	1.14	n.s.
16	Humble in dealing with students and teachers	15	1		3	1.45	n.s.
17	Enthusiastic in informing th staff the policies and regulations of school system	13	3	8	1	1.14	n.s.
18	Put suggestions in operation put by staff members	16	0	9	0	0.00	n.s.
19	Welcome students' views in staff meetings	14	2	7	2	0.05	n.s.

Item No.	Statement	Category A		Category B		x^2	Significance at .05 level
		Yes	No	Yes	No		
20.	Respect the dignity of others	13	3	8	1	1.14	n.s.
21.	Make provision for improving staff competencies	13	3	7	2	0.013	n.s.
22.	Encourage staff members to learn	7	9	6	3	0.87	n.s.
23.	Encourage staff members to develop interest in their inve improvement	14	2	7	2	1.14	n.s.
24.	Criticise poor work of teachers	14	2	7	2	1.14	n.s.
25.	Explain reasons for criticising the teachers	15	1	5	4	3.63	n.s.
26.	Criticise poor work of the students	14	2	6	3	0.63	n.s.
27.	Explain reasons for criticising the poor work of the students	14	2	5	4	2.30	n.s.
28.	Use constructive criticism	14	2	7	2	0.005	n.s.
29	Inspect the institution	16	0	9	0	0.00	n.s.
30	Organise faculty meetings	16	0	7	2	0.06	n.s.
31.	Themselves maintain school records	10	6	6	3	0.09	n.s.
32.	Clerks maintain school records	6	10	3	6	0.06	n.s.
33.	Send budget proposals	13	3	8	1	1.14	n.s.
34.	Satisfied with provisions for budgeting	13	3	6	3	0.02	n.s.
35.	Check the budget of the institution regularly	16	0	8	1	0.04	n.s.
36.	Utilize the funds given by the government properly	16	0	7	2	0.32	n.s.
37.	Themselves prepare the estimates of expenditure for coming year	16	0	5	4	5.48	Sig at .05 level
38.	Invite the parents of the students in the institution	16	0	7	2	0.32	n.s.

Item No.	Statement	Min.	Max.	Min.	Max.
39.	Grants received by institutions per year	4000	440000	2000	430000
40.	Revenue of the school per year	400	10000	500	4000
41.	Expenditure on building, library and laboratory per year	—	20000	—	15000

n.s. = Not significant at .05 level

Section III

This section relates to study of views of Heads of the selected institutions regarding factors affecting good/bad results in the schools showing consistently above average and below average results for the last five years in the matriculation examination conducted by J&K Board of School Education. The investigators employed Thurstone's Incomplete Rank Order. Views of heads working in these schools are calculated on the 15 factors given below in Table 3.30:

TABLE 3.30

Factors affecting consistently above average and below average results as viewed by Heads of the Schools

Factors	Description
A	Teacher's qualification
B	Teachers general ability
C	Teachers fund of knowledge
D	Teachers expression
E	Teachers style of dealing with children
F	Seriosness among students
G	Students of educated parents
H	Students belonging to rich families
I	Ability of students
J	Institutional environment
K	Effective leadership of head of institution
L	Locality of school
M	Economic condition of school
N	Building
O	Equipment

Heads were requested to rank five most important factors in order of preference. Rank 5 was given to the factor which they considered as most important in influencing the results of the school. Likewise ranks 4,3,2,1 were given.

The responses were tabulated and transformed into frequencies as shown in Tables 3.31 and 3.32.

TABLE 3.31

RESULTS OF SCHOOLS SHOWING ABOVE AVERAGE RESULTS

FREQUENCIES OF FACTORS AFFECTING

FACTORS

Ranks	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	1	3	1	3	5	1	1	1	3	1	1	1	0	1	0
4	2	2	2	2	1	3	1	0	4	0	0	0	2	0	0
3	3	0	2	1	0	2	3	1	1	5	1	1	0	0	0
2	2	2	2	4	2	0	2	0	2	0	0	0	0	0	0
1	1	1	1	2	1	1	1	1	2	2	0	0	0	0	0
0	10	7	9	5	5	11	10	13	0	12	15	15	16	13	16

TABLE 3.32

FREQUENCIES OF FACTORS AFFECTING RESULTS OF SCHOOLS SHOWING BELOW
AVERAGE RESULTS

Ranks							FACTORS								
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	1	1	1	2	1	1	0	1	3	3	0	1	0	1	1
4	0	0	0	2	2	0	1	0	1	2	0	0	0	0	0
3	1	0	0	1	1	2	0	0	1	1	0	1	0	0	0
2	1	1	0	1	1	1	0	0	2	2	0	0	0	0	2
1	1	1	0	1	1	1	1	0	1	1	0	1	0	0	0
0	5	6	8	2	3	4	7	8	1	6	9	6	9	8	6

Frequency Distribution was converted into matrix by dividing each cell entries by the total and
sum of the columns drawn at the base of the matrix as given in Table 3.33.

TABLE 3.33

PROPORTION MATRIX OF FACTORS AFFECTING RESULTS OF SCHOOLS SHOWING ABOVE AVERAGE RESULTS

FACTORS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A. Teachers qualification	.50	.65	.53	.66	.68	.48	.50	.40	.83	.43	.35	.34	.31	.42	.31
B. Teachers General ability	.35	.50	.44	.54	.60	.42	.40	.33	.71	.35	.29	.28	.25	.54	.25
C. Teachers fund of knowledge	.47	.56	.50	.62	.67	.46	.46	.37	.81	.34	.32	.34	.28	.40	.28
D. Teachers expression	.34	.46	.38	.50	.54	.33	.34	.25	.69	.34	.20	.28	.16	.28	.16
E. Teachers style of dealing with child	.32	.40	.33	.46	.50	.32	.30	.24	.71	.25	.20	.18	.16	.38	.16
F. Seriousness among students	.52	.58	.54	.67	.68	.50	.59	.43	.81	.46	.38	.37	.34	.44	.34
G. Students of educated perants	.50	.60	.54	.66	.70	.49	.50	.41	.85	.43	.35	.35	.31	.43	.31
H. Students belonging to rich families	.59	.67	.63	.75	.76	.57	.59	.50	.91	.53	.44	.44	.41	.51	.41
I. Ability of students	.17	.29	.19	.31	.29	.19	.15	.09	.50	.09	.06	.03	.11	.15	.00
J. Institutional environment	.57	.65	.61	.66	.95	.54	.57	.47	.91	.50	.41	.41	.37	.48	.37
K. Effective leadership of Head of Institution	.65	.71	.68	.80	.80	.62	.63	.56	.94	.59	.50	.50	.47	.56	.47
L. Locality of school (Rural-Urben)	.66	.72	.69	.81	.82	.63	.65	.56	.97	.59	.50	.50	.47	.57	.47
M. Economic condition of School	.69	.75	.72	.84	.84	.66	.69	.59	1.00	.63	.53	.53	.50	.59	.50
N. School Building	.58	.64	.60	.72	.62	.56	.57	.49	.85	.52	.44	.43	.41	.50	.59
O. Inadequate equipment	.69	.75	.72	.84	.84	.66	.67	.59	1.00	.63	.53	.53	.50	.41	.50
Total	7.60	9.05	8.10	9.84	10.09	7.43	7.48	6.29	12.49	6.75	5.50	5.42	4.94	6.66	5.12
Ranks	6	4	5	3	2	8	7	11	1	9	12	13	15	10	14

From the totals of the columns in Table 3.33, the Table 3.34 was arranged to the ascending order of the columns shown in Table 3.33.

Table 3.34

PROPORTION MATRIX OF FACTORS AFFECTING RESULTS OF SCHOOLS SHOWING ABOVE AVERAGE RESULTS

	M	O	L	K	H	N	J	F	G	A	C	B	D	E	I
N	.50	.59	.55	.55	.59	.59	.63	.66	.69	.69	.72	.75	.84	.84	1.00
O	.50	.50	.53	.53	.59	.58	.63	.66	.69	.69	.72	.75	.84	.84	1.00
L	.47	.50	.53	.50	.56	.56	.59	.63	.65	.66	.69	.72	.81	.82	.99
K	.47	.47	.50	.50	.56	.54	.59	.62	.65	.65	.68	.71	.80	.80	.94
H	.41	.47	.44	.44	.50	.51	.53	.57	.59	.59	.63	.67	.75	.76	.91
N	.41	.41	.43	.44	.49	.50	.52	.56	.57	.58	.61	.65	.72	.75	.91
J	.37	.37	.41	.41	.47	.48	.50	.54	.57	.57	.60	.65	.67	.70	.85
F	.34	.34	.37	.38	.43	.44	.56	.50	.51	.52	.54	.64	.66	.68	.85
G	.31	.31	.35	.35	.41	.43	.47	.49	.50	.50	.53	.60	.66	.68	.83
A	.31	.31	.34	.35	.41	.42	.43	.48	.50	.50	.53	.58	.66	.67	.81
C	.28	.28	.34	.32	.37	.41	.41	.46	.46	.47	.59	.56	.62	.62	.81
B	.25	.25	.28	.29	.33	.40	.35	.42	.40	.35	.44	.50	.54	.60	.71
D	.16	.16	.15	.20	.25	.38	.34	.34	.34	.34	.38	.46	.50	.54	.71
E	.16	.16	.13	.20	.24	.28	.25	.32	.30	.32	.33	.40	.46	.50	.69
I	.00	.00	.05	.06	.09	.15	.09	.19	.15	.17	.19	.29	.31	.29	.50
Total	4.94	5.12	5.42	5.50	6.29	6.66	6.85	7.43	7.48	7.60	8.10	9.05	9.84	10.09	12.49

.50 was subtracted from each cell value. The resultant matrix is given below in Table 3.35

TABLE 3.35
ABOVE

THE RESULTANT MATRIX OF SCHOOLS SHOWING/AVERAGE RESULTS.

	M	O	L	K	H	N	J	F	G	A	C	B	D	E	I
M	.00	.09	.03	.03	.09	.09	.13	.16	.19	.19	.22	.25	.34	.34	.50
O	.00	.00	.03	.03	.09	.07	.13	.16	.19	.22	.25	.34	.34	.50	
L	-.03	.00	.00	.00	.06	.06	.09	.13	.15	.16	.19	.22	.31	.32	.47
K	-.03	-.03	.00	.00	.06	.04	.09	.12	.15	.18	.21	.30	.30	.44	
H	-.09	-.03	-.06	-.06	.00	.01	.03	.07	.09	.09	.13	.17	.25	.24	.41
N	-.09	-.09	-.07	-.06	-.01	.00	.02	.06	.07	.08	.11	.15	.22	.25	.41
J	-.15	-.13	-.09	-.09	-.03	-.02	.00	.04	.01	.07	.10	.15	.18	.20	.35
F	-.16	-.16	-.13	-.12	-.07	-.06	-.04	.00	.00	.02	.04	.14	.36	.18	.35
G	-.19	-.19	-.15	-.15	-.09	-.07	-.07	-.01	.00	.00	.04	.10	.16	.17	.38
A	-.19	-.19	-.16	-.15	-.09	-.08	-.07	-.02	.00	.00	.03	.06	.16	.18	.31
C	-.22	-.22	-.16	-.18	-.13	-.09	-.09	.00	-.04	-.03	.00	.06	.12	.12	.31
B	-.25	-.25	-.22	-.21	-.17	-.10	-.15	-.04	-.10	-.15	-.06	.00	.04	.10	.21
D	-.34	-.34	-.31	-.30	-.25	-.12	-.16	-.17	-.16	-.16	-.12	-.04	-.00	.04	.21
E	-.34	-.34	-.32	-.30	-.26	-.22	-.25	-.18	-.20	-.18	-.17	-.10	-.04	.00	.19
I	-.50	-.50	-.47	-.46	-.41	-.35	-.41	-.31	-.35	-.33	-.31	-.21	-.19	-.21	00

The proportion matrix was then comp... matrix as shown in Table 3.36

TABLE 3.36

Z MATRIX OF SCHOOLS SHOWING ABOVE AVERAGE RESULTS

	M	O	L	K	H	N	J	G	F	A	C	B	D	E	I
M	.0000	.2275	.0753	.0753	.2275	.2275	.3319	.4125	.4959	.4959	.5825	.6745	.9945	.9945	3.2905
O	.0000	.0000	.0753	.0753	.2275	.1764	.3819	.4129	.4959	.4959	.5828	.6745	.9945	.9945	3.2905
L	-.0753	-.0753	.0000	.0000	.1510	.1510	.2275	.3519	.3853	.4125	.4959	.5828	.8799	.9154	1.8808
K	-.0753	-.0753	.0000	.0000	.1510	.1510	.2275	.3055	.3853	.3853	.4677	.5534	.8416	.8416	1.5548
H	-.2275	-.2275	-.1510	-.1510	.0000	.0451	.0953	.1764	.2275	.2275	.3319	.4399	.6745	.7063	1.3048
N	-.2275	-.1764	-.1510	-.1510	-.0451	.0000	.0502	.1510	.2019	.2019	.2793	.3853	.5828	.6745	1.3048
J	-.3319	-.3819	-.2275	-.2275	-.0953	-.0502	.0000	.1004	.1764	.176	.2633	.3853	.4399	.5244	1.0364
G	-.4125	-.4129	-.3519	-.3055	-.1764	-.1510	-.1004	.0000	.0251	.0502	.1004	.2019	.4325	.4677	1.0364
F	-.4125	-.4125	-.3853	-.3853	-.2275	-.2019	-.1764	-.0251	.0000	.0000	.1004	.2019	.4125	.4677	.9542
A	-.4959	-.4959	-.4125	-.3853	-.2275	-.2079	-.176	-.0502	.0000	.0000	.0753	.1510	.3055	.4399	.8779
C	-.5828	-.5828	-.4959	-.4677	-.3319	-.2793	-.2633	-.1004	-.1004	-.0753	.0000	.0000	.1004	.3055	.8779
B	-.6743	-.6745	-.5828	-.5534	-.4399	-.3853	-.3853	-.2019	-.2019	-.1510	.0000	.0000	-.0000	.2533	.5534
D	-.5945	-.9945	-.8799	-.8416	-.6745	-.5828	-.4399	-.4325	-.4125	-.3055	-.1004	.0000	.0000	.1004	.5534
E	-.9945	-.9945	-.9154	-.8416	-.7063	-.6745	-.5244	-.4677	-.4677	-.4399	-.3055	-.2533	-.1004	.0000	.4959
I	-3.2905	-3.2905	-1.8808	-1.5548	-1.3048	-1.3408	-1.0364	-.8779	-.9542	-.8779	-.8779	-.5534	-.5534	-.5534	-.0000
Total	-8.8786	-7.9277	-6.2034	-5.7141	-3.4682	-2.2035	-2.3491	-.3037	.0408	.0027	.0100	1.4955	3.5458	6.4022	7.1323	12.4307
Mean	-.5919	-.5285	-.4136	-.3809	-.2312	-.1469	-.1463	-.0202	.0027	.0100	.0997	.2364	.4268	.4755	.8287

TABLE AFTER ADDING .5919 IN EACH CASE

.0000	.0634	.1783	.2110	.3607	.4450	.4456	.5717	.5946	.6099	.6916	.8283	1.0187	1.0674	1.4206
(.00)	(.06)	(.18)	(.21)	(.36)	(.44)	(.44)	(.57)	(.59)	(.60)	(.69)	(.82)	(1.02)	(1.07)	(1.42)

The frequency distribution was converted into Matrix by dividing each individual in Table 332by the total and sum of the columns drawn at the base of the Matrix es given in Table 3.37

TABLE 3.37

PROPORTION MATRIX OF FACTORS AFFECTING RESULTS OF SCHOOLS SHOWING BELOW AVERAGE RESULTS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A	.50	.44	.35	.71	.72	.56	.38	.35	.77	.83	.28	.45	.28	.35	.43
B	.56	.50	.40	.75	.70	.65	.44	.40	.82	.87	.33	.59	.33	.40	.49
C	.65	.60	.50	.92	.76	.70	.55	.50	.86	.91	.45	.60	.45	.50	.50
D	.29	.25	.18	.50	.43	.33	.28	.30	.50	.62	.11	.26	.11	.20	.24
E	.28	.30	.24	.57	.50	.43	.27	.25	.66	.66	.17	.33	.17	.25	.30
F	.44	.35	.30	.67	.57	.50	.33	.30	.72	.79	.22	.39	.22	.22	.37
G	.62	.56	.49	.72	.73	.67	.50	.48	.87	.93	.39	.56	.39	.46	.56
H	.65	.60	.50;	.70	.75	.70	.54	.50	.86	.91	.45	.60	.45	.50	.60
I	.23	.13	.24	.50	.34	.28	.13	.14	.50	.57	.06	.21	.06	.14	.17
J	.17	.13	.09	.33	.34	.21	.07	.09	.43	.50	.00	.14	.00	.09	.11
K	.72	.67	.55	.89	.83	.78	.61	.55	.94	1.00	.50	.67	.50	.56	.67
L	.55	.41	.40	.74	.67	.61	.44	.40	.79	.86	.33	.50	.33	.40	.49
M	.72	.67	.55	.89	.83	.78	.61	.55	.94	1.00	.50	.67	.50	.56	.67
..	.65	.50	.50	.30	.75	.78	.50	.50	.86	.91	.44	.65	.44	.50	.60
O	.51	.51	.50	.76	.70	.63	.44	.40	.83	.17	.33	.51	.33	.40	.50
Total	7.60	6.77	5.89	10.40	9.62	8.61	6.55	5.69	...35	12.25	4.56	7.06	4.56	5.53	6.70
Rank	6	8	11	3	4	5	10	12	2	1	14.5	7	14.5	13	9

from the totals of to columns on Tables 3.37, the Table was arranged according to the ascending order of the columns in Table 3.37.

TABLE 3.38

PROPORTION MATRIX OF FACTORS AFFECTING RESULTS OF SCHOOLS SHOWING BELOW AVERAGE RESULTS

	K	M	N	F	C	G	O	B	L	A	F	E	D	I	J
H	.50	.50	.56	.5.	.55	.51	.67	.67	.61	.72	.78	.83	.89	.94	1.00
M	.50	.50	.56	.55	.55	.61	.67	.67	.67	.72	.78	.83	.89	.94	1.00
M	.50	.45	.50	.50	.50	.55	.60	.60	.60	.65	.78	.76	.82	.87	.93
N	.45	.45	.50	.50	.50	.54	.60	.60	.60	.65	.70	.75	.80	.86	.91
H	.45	.45	.50	.50	.50	.5.	.56	.60	.60	.65	.70	.75	.76	.86	.91
C	.39	.39	.46	.40	.50	.50	.50	.59	.59	.62	.67	.73	.75	.83	.91
G	.33	.33	.40	.40	.45	.44	.50	.51	.56	.57	.65	.72	.74	.82	.89
O	.33	.33	.40	.40	.40	.44	.49	.50	.51	.56	.63	.70	.72	.89	.87
B	.33	.33	.40	.40	.40	.44	.49	.44	.50	.55	.61	.70	.71	.77	.86
L	.28	.28	.35	.35	.35	.38	.43	.42	.45	.53	.56	.67	.70	.76	.83
I	.22	.22	.27	.30	.30	.33	.37	.35	.39	.44	.50	.57	.67	.72	.79
F	.17	.17	.25	.30	.24	.28	.30	.30	.33	.29	.3	.50	.57	.66	.66
E	.11	.11	.22	.25	.24	.27	.24	.25	.26	.28	.33	.43	.50	.50	.62
D	.06	.06	.20	.14	.18	.13	.17	.18	.21	.23	.28	.34	.50	.50	.57
I	.00	.00	.09	.0	.09	.17	.11	.13	.14	.17	.21	.3.	.38	.41	.50
Total= 56	4.56	5.53	5.65	5.5	6.13	6.70	5.77	7.06	7.60	6.6	6.52				12.25

.5. was subtracted from each cell yield. Resultant matrix is given below in Table 3.39

TABLE 3.39

RESULTANT MATRIX OF SCHOOLS SHOWING BELOW AVERAGE RESULTS

	L	M	N	H	C	G	O	B	A	A	F	E	D	I	J
K	.06	.00	.06	.05	.05	.11	.17	.10	.22	.28	.33	.39	.44	.44	.50
M	.00	.00	.06	.05	.05	.11	.17	.10	.22	.28	.33	.39	.44	.44	.50
N	-.05	-.05	.06	.06	.06	.05	.10	.10	.15	.28	.26	.25	.36	.37	.43
H	-.05	-.5	.06	.06	.06	.04	.16	.16	.15	.20	.25	.36	.36	.36	.41
C	-.06	-.06	.06	.06	.06	.04	.06	.10	.15	.25	.25	.26	.36	.36	.41
G	-.11	-.11	-.04	-.05	.06	.06	.10	.09	.12	.17	.23	.30	.33	.33	.41
O	-.17	-.17	-.10	-.10	-.05	-.06	.06	.01	.07	.15	.22	.22	.24	.32	.39
B	-.17	-.17	-.10	-.10	-.10	-.06	-.01	.06	.06	.13	.20	.22	.27	.37
L	-.17	-.17	-.10	-.10	-.10	-.06	-.06	-.06	.05	.11	.30	.31	.29	.36
F	-.22	-.22	-.15	-.15	-.15	-.12	-.07	-.09	-.05	.06	.17	.20	.26	.33
F	-.28	-.28	-.23	-.20	-.20	-.17	-.13	-.15	-.11	.06	.07	.17	.22	.29
E	-.33	-.33	-.25	-.26	-.26	-.22	-.20	-.20	-.17	.07	.00	.07	.16	.16
D	-.39	-.39	-.28	-.25	-.26	-.23	-.26	-.25	-.24	-.22	-.17	.00	.07	.12
I	-.44	-.44	-.30	-.35	-.32	-.37	-.33	-.32	-.29	-.27	-.22	-.16	.00	.00	.07
J	-.50	-.50	-.41	-.41	-.41	-.43	-.39	-.32	-.36	-.33	-.29	-.16	-.12	.09

Table 3.25

Z MATRIX OF SCHOOLS SHOWING BELOW AVERAGE RESULTS

	K	M	N	H	C	G	O	E	L	B	F	E	D	I	J
K	.0000	.0000	.7510	.1257	.1257	.2793	.4399	.5828	.4399	.4399	.7922	.9542	1.2265	1.5548	3.2905
M	.0000	.0000	.1510	.1257	.1257	.2793	.4399	.5828	.4399	.4399	.7722	.9542	1.2265	1.5548	3.2905
N	-.1257	-.1257	.0000	.0000	.0000	.1257	.2533	.3853	.2533	.2533	.7722	.7063	.9154	1.1264	1.4757
H	-.1257	-.1257	.0000	.0000	.0000	.1004	.2533	.3853	.2533	.2533	.5244	.6745	.8416	1.0803	1.3408
C	-.1510	-.1510	.0000	.0000	.0000	.1004	.1510	.3853	.2533	.2533	.5244	.6745	.7063	1.0803	1.3408
G	-.2793	-.2793	-.1004	-.1257	-.1257	.0000	.0000	.1764	.1510	.1510	.4399	.6128	.6745	1.0803	1.3408
O	-.4399	-.4399	-.2533	-.2533	-.2533	-.1510	.0000	.1510	.0251	.0000	.3853	.5828	.6433	.9542	1.2263
E	-.4399	-.4399	-.2533	-.2533	-.2533	-.1510	-.0251	.1257	.0251	.0000	.3319	.5244	.5828	.9154	1.1264
I	-.4399	-.4399	-.2533	-.2533	-.2533	-.1590	-.0251	.0000	.0000	-.1510	.2793	.5244	.5534	.8064	1.0803
A	-.5828	-.5828	-.3853	-.3853	-.3853	-.3055	-.1764	-.0000	-.1257	-.1275	.1510	.4399	.5244	.7388	.9542
F	-.7722	-.7722	-.6128	-.5244	-.5244	-.4399	-.3319	-.3853	-.2793	-.3853	.0000	.1764	.4399	.5828	.8064
E	-.9542	-.9542	-.6745	-.5244	-.5244	-.5828	-.5244	-.5244	-.4399	-.5244	-.1764	.0000	.1764	.4125	.4125
D	-1.2265	-1.2265	-.7722	-.7063	-.7063	-.6128	-.7063	-.7063	-.6433	-.6745	-.4399	-.1764	.0000	.0000	.3055
I	-1.5548	-1.5548	-.8416	-1.0803	-.9154	-1.1264	-.9542	-.9542	-.8064	-.9154	-.5828	-.4125	-.4125	.0000	.1764
J	-3.2905	-3.2905	-1.3408	-1.3408	-1.3408	-1.4757	-1.2265	-.9542	-1.2803	-1.1264	-.8064	-.4125	-.3055	-.2275	.0000
TOTAL	-10.372	-10.3724	-5.1855	-5.1639	-4.9585	-4.1110	-2.4325	-2.9473	-5.8230	8.2074	11.6595	18.1313			
MEAN	-.6915	-.6915	-.3450	-.3443	-.3305	-.2741	-.1622	-.1965	-.3882	.5472	.7743	1.2087			

TABLE 3.25 ADDING .6915 IN EACH CASE

.0000	.0000	.3459	.3472	.3610	.4174	.5293	.5150	.6627	.6848	.8882	.9797	1.2387	1.4653	1.9792
(.00)	(.00)	(.34)	(.35)	(.36)	(.42)	(.53)	(.56)	(.68)	(.68)	(.89)	(1.18)	(1.24)	(1.47)	(1.90)

TABLE 3.41

DIFFERENCES IN SCALE POSITIONS OF HEADS VIEWS REGARDING
FACTORS AFFECTING RESULTS IN SCHOOLS SHOWING ABOVE AVERAGE
AND BELOW AVERAGE RESULTS

Sr. No.	Factors		Difference in scale position
1.	Institutional Environment	J	1.45
2.	Adequate Equipments	O	0.47
3.	Locality of Schools viz. Urban/ Rural	L	0.42
4.	Teacher's Fund of Knowledge	C	0.33
5.	Seriousness among students	F	0.32
6.	Teacher's General Ability	B	0.26
7.	Teacher's Expression	D	0.22
8.	Effective Leadership of Head	K	0.21
9.	Students of Educated Parents	G	0.17
10.	Building	N	0.10
11.	Teacher's Qualifications	A	0.08
12.	Ability of Students	I	0.05
13.	Teacher's style of dealing with Child	E	0.01
14.	Students belonging to rich families	H	0.01
15.	Economic condition of school	M	0.00

RELIABILITY OF THE DIFFERENCES OF THE PROPORTIONS OF VIEWS
OF HEADS REGARDING FACTORS AFFECTING RESULTS IN SCHOOLS
SHOWING ABOVE AVERAGE AND BELOW AVERAGE RESULTS:

For finding the significance of the above differences, it
is essential that we find standard error of the different
proportions.

Computations for σ_P (Standard error of the proportions)
for each problem was done with the help of the formula given
below:-

$$\sigma_P = \sqrt{\frac{Pq}{N}}$$

p =Proportion of occurrence of behaviour

    q = 1 - P

    N = Number of cases

The investigator computed the standard error of differe
of proportion (σdp) with the help of formula given below:-

$$\sigma_{dP} = \sqrt{\sigma P_1^2 + \sigma P_2^2}$$ whereas σdP = Standard error
of the difference of the proportions

    σP_1 = standard error of the proportion of Ist group and

    σP_2 = standard error of the proportion of 2nd group.

For calculating the critical ratio, the researcher
employed the formula which is given below:

$$C\,R = \frac{P_1 \sim P_2}{\sigma dP}$$ whereas $P_1 \sim P_2$ = Difference of the
proportions of the head's views regarding factors affecting
results in two groups.

The values of critical ratio of the heads' views
regarding factors affecting results working in schools showing
above average and below average results are given in the
Table 3.42 alongwith other values which have been computed for
critical ratios.

TABLE 3.42

SIGNIFICANCE OF DIFFERENCES BETWEEN THE VIEWS OF HEADS WORKING
IN SCHOOLS SHOWING ABOVE AVERAGE AND BELOW AVERAGE RESULTS

ctors	Proportions of Heads of schools showing							
	Above Average results P_1	Below Average results P_2	q_1	q_2	σ_{P_1}	σ_{P_2}	σ_{dP}	$P_1 - P_2$	C.R.
Teachers qualification	.51	.51	.49	.49	.0999	.0999	.1407	0.00	0.00
Teachers General Ability	.60	.45	.40	.55	.0979	.0995	.1396	.15	1.07
Teachers Fund of knowledge	.54	.38	.46	.62	.0997	.0971	.1390	.16	1.15
Teachers expression	.66	.69	.34	.31	.0947	.0925	.1324	.03	0.23
Teachers style of dealing with child	.67	.64	.33	.36	.0940	.0960	.1342	.03	0.22
Seriousness among students	.49	.57	.51	.43	.0999	.0990	.1404	.08	0.57
Students of Educated parents	.50	.41	.50	.59	.1000	.0984	.1403	.09	0.6
Students belonging to rich families	.42	.38	.58	.62	.0987	.0971	.1383	.04	0.29
Ability of Students	.83	.72	.17	.28	.0751	.0898	.1169	.11	0.94
Institutional environment	.45	.82	.55	.18	.0995	.0768	.1257	.37	2.9 *
Effective leadership of Principal/Head-master	.37	.30	.63	.70	.0966	.0916	.1330	.07	0.53
Locality of School viz. Urban-Rural	.36	.40	.64	.60	.0960	.0979	.1370	.04	0.29
Economic conditions of School	.33	.30	.67	.70	.0940	.0916	.1311	.03	0.23
Building	.44	.37	.56	.63	.0993	.0996	.1406	.07	0.5
Adequate Equipments	.34	.45	.66	.55	.0947	.0995	.1373	.11	0.8

Significant at .01 level of significance.

Section Four:

This section is further split into four sub-sections A, B, C and D in which separate type of the analysis is presented. In each of the sub-section, analysis of variance is employed to study mean differences in dependant variable in relation to the treatment variables.

3.4.1 Sub Section A :

Study of Mean Differences of Teaching Competency in Relation to Training and Type of Results:

In this sub section, the objective of the study was to see the significance of differences in the classroom teaching competency of trained and untrained teachers in relation to two types of schools showing consistently above and below aver: results. For this purpose, the researchers utilized two way analysis of variance technique.

There were two levels of training and two levels of results were taken up as follows:

A_1 stands for Trained Teachers

A_2 stands for Untrained Teachers

B_1 stands for schools showing above average results

B_2 stands for schools showing below average results.

Thus a 2x2 factorial design was prepared as given b-l

A_1B_1 - Trained Teachers working in schools showing above average results

A_1B_2 - Trained Teachers working in schools showing below average results

A_2B_1 - Untrained Teachers working in schools showing above average results

A_2B_2 - Untrained Teachers working in schools showing below average results.

Teaching competency scores of trained and untrained teachers belonging to schools showing above average and below average results were computed separately. However, all scores could not be utilized for calculations as number of observatio

in each cell of the factorial design were unequal. So, mean values were calculated for each cell which were utilized as a single value for computing differences in means through analysis of variance. This procedure is utilized for computing the differences in mean scores in all cases viz. sub sections A,B,C and D.

. Further the researchers present only mean scores of different cells of the factorial design along with the summary of Anova in Tables 3.42 to 3.66.

The mean teaching competency scores of trained and untrained teachers belonging to schools showing above average and below average results followed by summary of Anova are shown in Tables 3.43 and 3.44.

Table 3.43

Mean teaching competency scores of Trained and Untrained Teachers belonging to schools showing above average and below average results (N = 100)

Teachers

		A_1(Trained)	A_2(Untrained)	Σ
Above Average Results	B_1	102.86	97.68	200.54
Below Average Results	B_2	78.12	78.91	157.03
Σ		180.98	176.59	357.57

Table 3.44

Summary of ANOVA of Teaching competency scores in relation to Training of Teachers and type of Results

Sources of variation	S.S.	df	M.S.	F-ratio	Significance
Teachers (A)	4.8	1	4.8	0.19	Insignificant
Schools (B)	473.28	1	473.28	19.09	Significant at .C level
Teachers x Schools (AxB)	8.92	1	8.92	0.36	Insignificant
Error	2379.85	96	24.79	-	

3.4.2   Sub-Section(B):

Study of Mean Differences in Different Areas of Teacher Adjustment in relation to locality, Economic Status and Type of Results:

In this section the investigator dealt with the study of mean differences in the adjustment scores of teachers with respect to locality, economic status (ES) and type of results. Different areas of adjustment viz. Health, Home-Social, Economic Institutional and Ethical were taken up separately. For this purpose the investigator applied three way analysis of variance technique. Here two levels of locality i.e. urban and rural, two levels of a economic status i.e. HES and LES, and two levels of result i.e. above average and below average were taken up. A 2x2x2 factorial design was prepared as given below:-

A_1 stands for teachers belonging to urban locality

A_2 stands for teachers belonging to rural locality

B_1 stands for teachers belonging to HES

B_2 stands for teachers belonging to LES

C_1 stands for teachers working in schools showing above average results,

C_2 stands for teachers working in schools showing below average results.

The adjustment scores for five different areas were taken separately for different levels of independent variables. The three way analysis of variance was computed separately for each of five areas of adjustment. The mean adjustment scores of five areas along with the results in summary of Anova are presented in Tables 3.45 to 3.54:

TABLE 3.45

Mean Health Adjustment (Element A) Scores of
Teachers in relation to their locality,
Economic Status and Type of Results.

Locality	A_1 (Urban)		A_2 (Rural)		Σ
Economic Status	B_1 (HES)	B_2 (LES)	B_1 (HES)	B_2 (LES)	
C_1 (Above Average Results)	25.12	27.00	24.94	23.67	100.73
C_2 (Below average Results)	24.67	22.40	25.14	23.42	95.63
Σ	49.79	49.40	50.08	47.09	196.36

TABLE 3.46

Summary of Anova on Health Adjustment Scores
of Teachers in relation to their locality,
Economic Status and Type of Results.

Sources of Variation	S.S.	df	M.S.	F-ratio	Significance at .05 lvl
Locality (A)	3.2511	1	3.2511	1.96	n.s.
Economic Status (B)	0.5101	1	0.5101	0.31	n.s.
Type of Results (C)	1.4281	1	1.4281	0.86	n.s.
Localityx Economic Status (AxB)	3.1251	1	3.1251	1.86	n.s.
Localityx Type of Results (AxC)	3.5631	1	3.5631	2.15	n.s.
Economic Status x Type of Results (BxC)	0.8449	1	0.8449	0.51	n.s.
LocalityxEconomic Statu xType of Results (AxBxC)	1.6400	1	1.6400	0.99	n.s.
Error	152.7200	92	1.6600	—	—

TABLE 3.47

Mean Values of Element B (Home-Social) of Adjustment
of Teachers in Relation to Locality, Economic Status
And Types of Results:

	A_1 (Urban)		A_2 (Rural)		
	(HES) B_1	(LES) B_2	(HES) B_1	(LES) B_2	
(Above Average Results) C_1	22.36	23.11	24.35	20.22	90.0
(Below Average Results) C_2	21.33	21.00	23.07	20.17	85.5
Σ	43.69	44.11	47.42	40.39	175.0

TABLE 3.48

Summary showing Analysis of Variance on Element B
(Home-Social) of Adjustment of Teachers in relation
to locality Economic Status and Type of Results:

Sources of Variation	S.S.	df	M.S.	F-ratios	Significance
A	2.50	1	2.50	1.49	n.s.
B	0.00	1	0.00	0.00	n.s.
C	5.46	1	5.46	3.25	n.s.
A x B	0.41	1	0.41	0.24	n.s.
A x C	0.003	1	0.003	0.002	n.s.
B x C	6.94	1	6.94	4.13	Significant at .05 level
A x B x C	0.67	1	0.67	0.40	n.s.
Error	154.55	92	1.68	-	

n.s.= Not significant at .05 level of Significance

TABLE 3.49

Mean value of Element C (Economic) of Adjustment of Teachers in Relations to Locality, Economic Status and Type of Results

| | (URBAN) A_1 | | (RURAL) A_2 | | |
	(HES) B_1	(LES) B_2	(HES) B_1	(LES) B_2	$\sum$
(Above Average Results) C_1	20.28	19.11	21.29	17.11	72.79
(Below Average Results) C_2	17.11	18.20	18.00	16.50	69.81
$\sum$	37.39	37.31	39.29	33.61	147.60

TABLE 3.50

Summary showing Analysis of Variance on Element C (Economic) of Adjustment of Teachers in Relation to Locality, Economic Status and Type of Results

Sources of Variation	S.S.	df	M.S.	F-ratio	Significance
A	7.96	1	7.96	1.48	n.s.
B	0.41	1	0.41	0.076	n.s.
C	4.15	1	4.15	0.77	n.s.
AxB	0.004	1	0.004	0.0007	n.s.
AxC	3.05	1	3.05	0.57	n.s.
BxC	3.74	1	3.74	0.70	n.s.
AxBxC	0.20	1	0.20	0.04	n.s.
Error	494.95	92	5.38	-	

n.s. = Not significant at .05 level of Significance

TABLE 3.51

Mean values of Element D of Institutional Adjustment of Teachers in Relation to Locality, Economic Status and Type of Results

| | (Urban) A_1 | | (Rural) A_2 | | |
	(HES) B_1	(LES) B_2	(HES) B_1	(LES) B_2	$\sum$
Above Average Result C_1	21.92	23.67	22.82	17.89	86.30
Below Average Result C_2	22.22	20.00	22.57	21.92	86.31
$\sum$	44.14	43.67	45.39	39.31	172.51

TABLE 3.52

Summary showing Analysis of Variance of Elements D
(Institutional) of Adjustment of Teachers in
Relation to Locality, Economic Status and Type of Result

Sources of Variation	S.S.	df	M.S.	F-ratio	Significance
A	0.001	1	0.001	0.001	n.s.
B	1.209	1	1.209	0.67	n.s.
C	5.363	1	5.363	2.82	n.s.
A x B	5.528	1	5.528	2.91	n.s.
A x C	0.005	1	0.005	0.002	n.s.
B x C	3.93	1	3.93	2.07	n.s.
A x B x C	7.508	1	7.508	3.95	Significant .05 level
Error	174.80	92	1.90	-	

n.s. = Not significant at .05 level of Significance

TABLE 3.53

Showing Mean values of Element E (Ethical) Adjustment of
Teachers in Relation to Locality, Economic Status and Type of
Results

	(Urban) A1		(Rural) A2		
	(HES) B1	(LES) B2	(HES) B1	(LES) B2	Σ
(Above Average Result) C1	19.76	22.10	19.82	20.00	81.68
(Below Average Result) C2	20.22	22.20	20.00	20.23	82.65
Σ	39.98	44.30	39.82	40.23	164.33

TABLE 3.54

Summary of Analysis of Variance of Element E (Ethical) of
Adjustment of Teachers in Relation to Locality, Economic Status
and Type of Results:

Sources of Variation	S.S.	df	M.S.	F-ratio	Significance
A	0.146	1	0.146	0.14	n.s.
B	2.122	1	2.122	1.98	n.s.
C	2.928	1	2.928	2.74	n.s.
A x B	0.0004	1	0.0004	0.0004	n.s.
A x C	0.046	1	0.046	0.042	n.s.
B x C	1.824	1	1.824	1.70	n.s.
A x B x C	0.034	1	0.034	0.032	n.s.
Error	98.44	92	1.07		

n.s. = Not significant at .05 level of Significance

3.4.3 Sub-Section C:

Study of Mean Differences in Different Areas of Adjustment in Relation to Sex, Type of Results and Competency of Teachers.

In this section, the investigator dealt with the study of mean differences in different areas of teacher adjustment in relation to sex, type of results and their teaching competency. For this purpose, the investigators employed three way analysis of variance - technique. There were two levels of sex i.e. male and female, two levels of type of results i.e. schools showing above average results and schools showing below average results and two levels of teaching competency i.e. competent and non-competent teachers were taken up. In this way 2x2x2 factorial design was set up as such:

A_1 stands for Male teachers

A_2 stands for Female teachers

B_1 stands for Schools showing above average results

B_2 stands for schools showing below average results.

C_1 stands for competent teachers

C_2 stands for non-competent teachers.

The adjustment scores for five different areas were taken separately for different levels of independant variables. The three way analysis of variance was computed separately for each of five areas of adjustment as done in earlier sections. The researchers present only the mean adjustment scores of five areas alongwith the results shown in summary of Anova. The mean adjustment score for each of five areas followed by Summary is shown in Tables 3.55 to 3.64.

TABLE 3.55

Mean valu s of Element A (Health) of Adjustment of Teachers in
Relation to Sex, Typ of Results and Teaching competency,

	(Male) A$_1$		(Female) A$_2$		
	(Above Average Result) B$_1$	(Below Average Result) B$_2$	(Above Average Result) B$_1$	(Below Aver- -age Result B$_2$	Σ
(Competent Teachers) C$_1$	28.83	28.17	29.00	28.67	114.67
(Non-competent Teachers) C$_2$	24.40	28.45	28.50	27.67	112.02
Σ	56.23	56.62	57.50	56.34	226.69

TABLE 3.56

Summary showing Analysis of variance of Element A of Adjustm t
(Health) in Relation to Sex, Type of Result and Teaching
Competency of Teachers:

Sources of Variation	S.S.	df	M.S.	F-ratio	Significance
A	0.13	1	0.13	1.08	n.s.
B	0.08	1	0.08	0.67	n.s.
C	0.88	1	0.88	7.33	Significant at .01 level
AxB	0.30	1	0.30	2.50	n.s.
AxC	0.00	1	0.00	0.00	n.s.
BxC	0.17	1	0.17	1.42	n.s.
AxBxC	28.55	1	28.55	237.92	Significant at .01 level
Error	10.43	87	0.12	-	

n.s.= Not significant at .05 level of significance

TABLE 3.57

Mean values of Element B (Home-Social) of Adjustment of Teach s
in Relation to Sex, Type of Results and Teaching Competency:

	(Male) A$_1$		(Female) A$_2$		
	(Above Average Result) B$_1$	(Below Average Result) B$_2$	(Above Average Result) B$_1$	(Below Average Result) B$_2$	Σ
(Competent Teachers) C$_1$	25.48	21.60	21.63	23.60	92.31
(Non-Competent Teachers) C$_2$	20.17	21.00	23.86	15.80	80.83
Σ	45.65	42.60	45.49	39.40	173.14

TABLE 3.58

Summary of Analysis of Variance of Element B(Home-Social) of Adjustment of Teachers in Relation to Sex Type of Results and Teaching Competency

Sources of variation	S.S.	df	M.S.	F-Ratio	Significance
A	1.42	1	1.42	0.48	n.s.
B	10.44	1	10.44	3.50	n.s.
C	16.47	1	16.47	5.53	Significant at .05 level
AxB	1.15	1	1.15	0.39	n.s.
AxC	0.00	1	0.00	0.00	n.s.
BxC	3.55	1	3.55	1.19	n.s.
AxBxC	27.16	1	27.16	9.11	Significant at .01 level
Error	259.25	87	2.98	–	

n.s. = Not significant at .05 level of significance.

TABLE 3.59

Mean values of Element C (Economic) of Adjustment of Teachers in Relation to Sex, Type of Results and Teaching Competency

	(Male) A1		(Female) A2		
	(Above Average Results) B_1	(Below Average Results) B_2	(Above Average Results) B_1	(Below Average Results) B_2	$\sum$
C_1 (Competent Teachers)	21.57	19.00	19.71	20.80	81.08
C_2 (Non-competent Teachers)	8.80	17.58	22.25	18.20	66.83
$\sum$	30.37	36.58	41.96	39.00	147.91

TABLE 3.60

Summary showing Analysis of variance of Element C(Economic) of Adjustment of Teachers in Relation to Sex, Type of Result and Teaching Competency.

Sources of variation	S.S.	df	M.S.	F-ratios	Significance
A	24.54	1	24.54	3.62	n.s.
B	1.32	1	1.32	0.19	n.s.
C	25.38	1	25.38	3.74	n.s.
AxB	10.51	1	10.51	1.55	n.s.
AxC	24.95	1	24.95	3.68	n.s.
BxC	4.82	1	4.82	0.71	n.s.
AxBxC	33.79	1	33.79	4.98	Significant at .05 level
Error	589.88	87	6.78	–	

n.s. = Not significant at .05 level of significance.

TABLE 3.61

Mean values of Element D(Institutional) of Adjustment of Teach in Relation to Sex, Type of Results and Teaching Competency:

	(Male)A1		(Female)A2		
	(Above Average Results) B_1	(Below Average Results) B_2	(Above Average Results) B_2	(Below average Results) B_1	Σ
C_1 (Competent Teachers)	23.00	18.00	17.77	21.60	80.37
C_2 (Non-competent Teachers)	18.00	21.00	22.44	14.20	75.64
Σ	41.00	39.00	40.21	35.80	156.01

TABLE 3.62

Summary showing Analysis of Variance of Element D(Institution of Adjustment of Teachers in Relation to Sex, Type of Results and Teaching Competency:

Sources of variation	S.S.	df	M.S.	F-ratios	Significanc
A	1.99	1	1.99	1.09	n.s.
B	5.14	1	5.14	2.81	n.s.
C	2.79	1	2.79	1.52	n.s.
AxB	0.72	1	0.72	0.39	n.s.
AxC	0.06	1	0.06	0.03	n.s.
BxC	2.06	1	2.06	1.13	n.s.
AxBxC	50.24	1	50.24	27.45	Significant at 0.01 level
Error	159.22	87	1.83	–	

n.s. = not significant at .05 level of significance.

TABLE 3.63

Mean values of Element E (Ethical) of Adjustment of Teachers Relation to Sex, Type of Results and Teaching Competency:

	(Male)A1		(Female)A2		
	(Above Average Result) B_1	(Below Average Result) B_2	(Above Average Result) B_1	(Below Average Result) B_2	Σ
C_1 (Competent Teachers)	21.00	19.80	19.18	18.00	77.9b
C_2 (Non-competent Teachers)	18.40	21.04	18.30	15.17	72.98
Σ	39.40	40.84	37;48	33.17	150.96

TABLE 3.64

Summary showing Analysis of Variance of Element E(Ethical) of Adjustment of Teachers in Relation to Sex, Type of Result and Teaching Competency

Sources of variation	S.S.	df	M.S.	F-ratios	Significance
A	11.5	1	11.5	5.78	Significant at 0.05 level
B	1.03	1	1.03	0.52	n.s.
C	3.20	1	3.20	1.61	n.s.
AxB	4.12	1	4.12	2.07	n.s.
AxC	0.71	1	0.71	0.36	n.s.
BxC	0.47	1	0.47	0.24	n.s.
AxBxC	4.17	1	4.17	2.10	n.s.
Error	173.17	87	1.99	-	

n.s. = Not significant at .05 level of Significance.

3.4.4   Sub-Section D:

Study of Mean Differences in Teaching Competency Scores of Teachers in Relation to their Experience, Qualification and type of Results:

In this Sub-Section, the investigators dealt with the study of mean differences in competency scores of teachers in relation to their experience, qualification and type of results. For this purpose, the investigators again made use of three way analysis of variance technique. Here, two levels of experience i.e. high experienced and low experienced teachers, two levels of qualification i.e. post-graduate and under-graduate teachers and two types of results i.e. above average and below average results were taken up. So a 2x2x2 factorial design was prepared as follows:

A1 stands for highly experienced teachers
A2 stands for low experienced teachers
B1 stands for post-graduate teachers
B2 stands for under-graduate teachers
C1 stands for schools showing above average results
C2 stands for schools showing below average results.

The computations of three way analysis of variance on mean teaching competency scores of teachers in relation to their experience, qualification and type of result were done in same way as followed in earlier sub sections. The mean teaching competency scores in various cells of factorial experiment followed by summary of anova results are given in Tables 3.65 & 3.66.

TABLE 3.65

Mean values of Teaching Competency scores of Teachers in relation to their experience, qualification & type of Result

| | A_1(highly experienced) | | A_2(Low experienced) | | |
	B_1(Post-Graduate)	B_2(Under-Graduate)	B_1(Post-Graduate)	B_2(Under-Graduate)	Σ
(Above Average Results) C_1	98.29	58.00	110.00	50.40	316.69
(Below Average Results) C_2	90.75	109.00	108.14	95.40	403.29
Σ	189.04	167.00	218.14	145.80	719.98

TABLE 3.66

Summary showing analysis of variance on Teaching Competency of Teachers in relation to their Experience, Qualification and Type of Results

Sources of variation	S.S.	df	M.S.	F-ratio	Significance
A	937.45	1	937.45	14.76	Significant at (level
B	7.78	1	7.78	0.12	n.s.
C	1113.45	1	1113.45	17.53	Significant at level
AxB	0.01	1	0.01	0.0002	n.s.
AxC	1388.54	1	1388.54	21.86	Significant at 0. level
BxC	316.26	1	316.26	4.98	Significant at (level
AxBxC	17.06	1	17.06	0.27	n.s.
Error	5525.36	87	63.51	–	

n.s.= Not significant at .05 level of significance.

3.5   Section Five

Study of Relationship between competent and non-competent teachers with the total adjustment scores.

In this section, the researcher has made use of biserial correlation technique for studying relationship between competent and non-competent teachers in relation to their total adjustment scores. The computations are shown in Table 3.67.

TABLE 3.67

Computation of r_{bis} between adjustment scores of competent and non - competent Teachers

Scores	Competent Teachers f_1	Non-Competent Teachers f_2	Combined f_5
140-149	3	0	3
130-139	6	3	9
120-129	10	3	13
110-119	6	6	12
100-109	3	1	4
90-99	1	0	1
80-89	0	0	0
70-79	0	0	0
70-69	0	0	0

$$N_1 = 29 \qquad N_2 = 13 \qquad N = 42$$

$$M_p = 125.53 \qquad M_q = 170.65 \qquad M_T = 126.40$$

$$p = 0.69 \qquad q = 0.31 \qquad \sigma_T = 11.58$$

$$\mu = 0.353$$

$$r_{bis} = \frac{M_p - M_q}{\sigma_T} \times \frac{p_q}{\mu} = \frac{125.53-120.65}{1.58} \times \frac{69 \times 0}{0.35}$$

$$r_{bis} = 0.25$$

M_T = Mean of adjustment scores of all 42 teachers

M_P = Mean of adjustment scores of 29 competent teachers

M_q = Mean of adjustment scores of 13 non-competent teachers

p = Proportion in Group-I

q = Proportion in Group -II.

σ_t = S.D. of adjustment scores of all teachers

u = Height of ordinate separating 0.69 and 0.31 in a unit normal distribution.

The interpretation of the results of different analysis has been dealt in next Chapter.

CHAPTER - 1V

DISCUSSION OF RESULTS

The results obtained in earlier chapter need to be discussed and interpreted in order to understand the relation ship of different variables. The results of the present study are presented in five sections. The first and second section relate to study of organisational and administrative pattern of the schools showing consistently above and below average percentage of results. The third section pertains to the views of the heads and the inferences therein. The fourth section is concerned with the study of mean differences in adjustment scores and competency scores of teachers in relation to different other variables like sex, qualification, training, locality, experience and type of results etc. The fifth section is devoted to the study of relationship between adjustment scores of competent and non-competent teachers.

Section 1

In this section, organisation pattern of two types of schools is discussed.

The results obtained on the basis of check-list respo are shown in Tables 3.1 to 3.28. These responses are divided into 10 sub-sections. The data shows that on the whole schools showing above average results (Category A) have better organisation pattern as compared to schools showing below average results (Category B).

1. Tables 3.1 and 3.2 show that number of teachers serving in the institutions of category A on an average is more and better qualified than that of teachers of category B. This shows that qualification and training definitely play a significant role in enhancing the performance of the students

because qualified teachers are more rich in content and training. Table 3.3 indicates that teachers working in institutions of Category B have more work load than that of teachers of category A. Consequently teachers of category B may get fatigued on account of more work load which may adversely affect their teaching. It is clear from Table 3.4 that whereas total experience of heads in the institutions of category A is less in comparison to that of heads of category, they have more experience in the institutions in which they are serving at present. This shows that experience of the heads does not affect the performance of the students.

2. Tables 3.5 and 3.6 deal with location of the institut. distance and transportation facilities available to the students. They show that surroundings of the institution in urban and rural areas as well as distance and transportation facilities, which are better in institutions of category A, may have positive effect on the performance of students.

3. Table 3.7 shows that more institutions of category A have planned building in which classrooms, laboratory and offi are situated at one place. This helps in better organisation. of the school work.

4. Tables 3.8 to 3.14 deal with physical facilities available in the schools. The data indicate that institutions of category A have more physical facilities in the form of dispensary, library, laboratory, study hall, craft room etc. as compared to institutions of category B. The institutions of category A have more separate offices for clerical staff, electrical heating and fan facilities as compared to institutions of category B. Better facilities certainly help in more work and better performance of the students.

5. The information about the classrooms and sections is shown in Tables 3.15 to 3.17. The institutions of Category A have more classrooms and of bigger size than institutions of category B. However, average number of sections per class and separate rooms for each section are more in institutions of category A. The average number of students in each section in institutions of Category A is less as compared to institutions of category B. This shows that more students take admission in institutions of category A and there is also less crowding in the classes. This facilitates in better individual attention which effects the school result in a positive manner.

6. The information regarding hardwares is summarized in Tables 3.18 and 3.19. The tables show that institutions of category A have more furniture and notice boards than institutions of category B.

7. Tables 3.20 to 3.22 deal with maintainance and checking of school records. It is evident that more institutions of category A maintain a diary of weekly programmes and separate file for students. This helps in better coordination and planning of the teaching work due to which they show better results than institutions of category B.

8. Table 3.23 shows that more institutions of category A use models and maps as teaching aids than institutions of category B. Teaching aids certainly help in better understanding of the lecture which positively affects their performance.

9. Cocurricular activities are dealt within Tables 3.24 to 3.26 and 3.28. It is evident from the Data that all the institutions of category A and category B have provision for co-curricular activities. However, more institutions of category A organise dances, painting competitions, science fai.

and celebration of important days than institutions of cat -
B. Further, frequency of organising such activities, parti-
pation of teachers in these activities and provision of row
and library facilities to students is better in institutions
category A. This shows that provision of co-curricular
activities is better in institutions of Category A than insti-
tutions of category B. This helps in all round and harmoni u
development of their students.

10. Table 3.27 shows that more institutions of category /
provide moral education to their students as compared to
institutions of category B. This makes the students more
tolerant, knowledgeable, broadminded and tension free.

Thus, we can see that institutions of category A ar
better maintained, have more physical facilities and hardwa
have more and better qualified teachers and more institutions
of this category have provision for co-curricular activities
as compared to institutions of category B. The cumulative
effect of all these factors results in better performance of
the students of these institutions. So the hypothesis No.2
that the organisational pattern of both types of schools may
be different is accepted

Section II : **Administrative** Style of Heads of Two Types of Sc
In this section, administrative style of the heads of
both types of institutions has been compared. It is evident
from Table 3.29 that all the values of X^2 (except for item No.3
at 1df are insignificant at .05 level of significance. It reve
that there are no significant differences in the administrativ
style of the heads belonging to Category A and B on all items
except on item No.37, "Themselves prepare the estimates of exp
diture for coming calender years", where X^2 is significant at
.05 level. So, the hypothesis that there may be significant
differences in the administrative style of the heads belonging
to different categories can not be accepted.
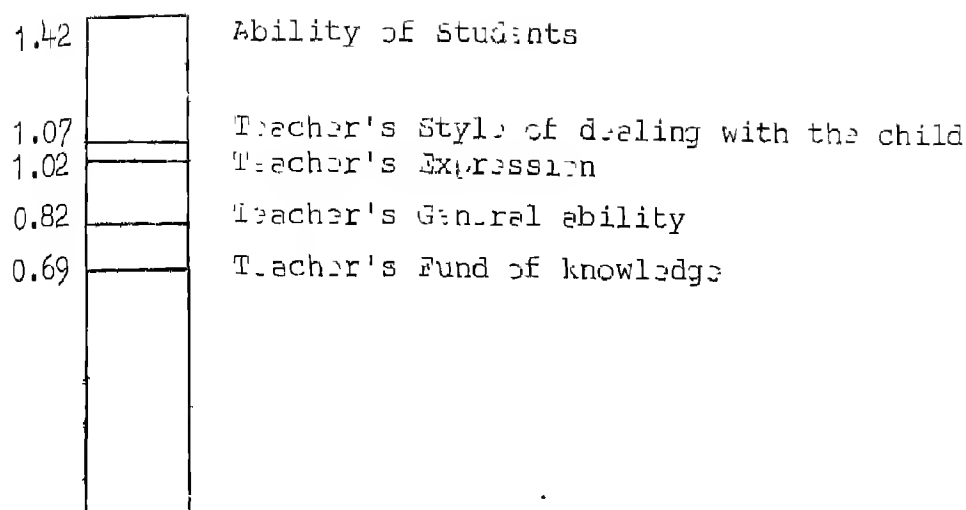
1.42 — Ability of Students

1.07 — Teacher's Style of dealing with the child
1.02 — Teacher's Expression

0.82 — Teacher's General ability

0.69 — Teacher's Fund of knowledge

Fig. 1: Scale values of the first five factors affecting
School results as viewed by the Heads belonging
to schools showing consistently above average results.

1.90 — Institutional environment

1.47 — Ability of Students

1.24 — Teacher's Expression

1.08 — Teacher's Style of dealing with the child

0.89 — Seriousness among students
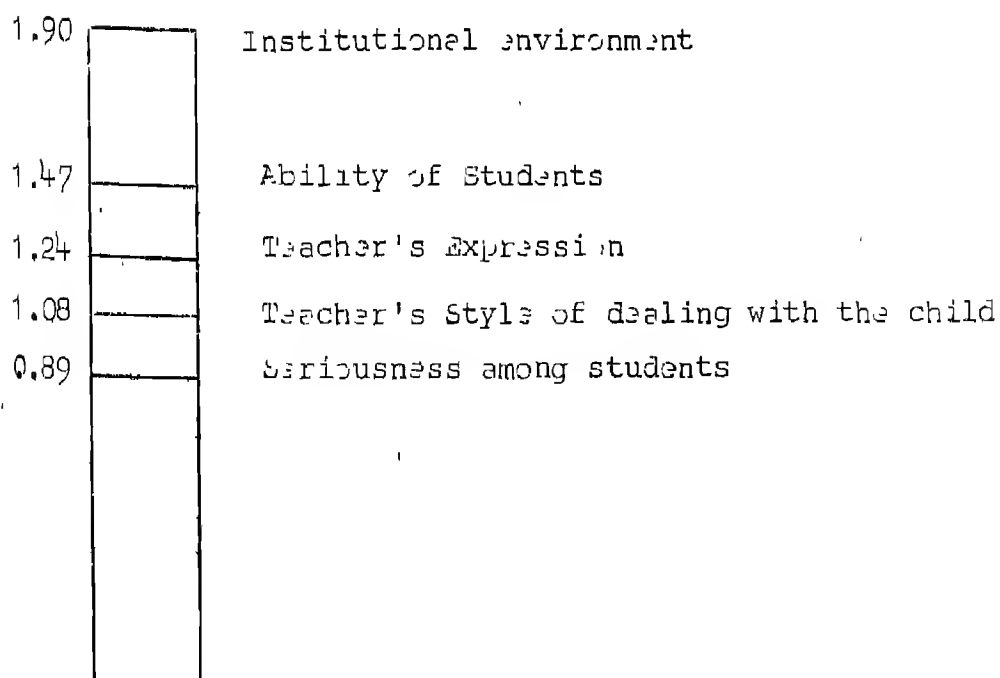
Fig. 2: Scale values of the first five factors affecting
School' results as viewed by the Heads belonging
to schools showing consistently below average results.

Section III

Views of Heads of Schools showing Above Average Percentage of Results:

The investigator analysed the data of Heads working in schools showing good results. The views were scaled on a continuum in order of preferences. A diagramatic description of the scale values is given in figure 1 and Table. 3.36 Figure 1 and Table 3.36 indicate that ability of the students stand at the top as viewed by heads working in schools showing consistently above average percentage of results. The heads regard students ability as the prime factor which affect results too much. The scale value of this factor is 1.42. They consider teachers style of dealing with the child as the second important factor. The scale value of this factor is 1.07. The third factor which they consider important for affecting results is teachers expression with scale value of 1.02. Teacher's general ability is the fourth factor according to the heads of schools showing consistently above average percentage of result. The scale value of this factor is 0.82 Fifthly, they were of the opinion that teachers fund of knowledge also affect result to a great extent. The scale value of this factor came to be 0.69. The other factors ranked were as such:-

VI   Teachers qualification

VII   Students of Educated Parents

VIII Seriousness among the students.

IX   Institutional Environment

X   Building of School

XI   Students belonging to Rich Families

XII   Effective leadership of Head

XIII Locality of School

XIV   Adequate Equipment

XV   Economic Conditions.

Head of Schools showing Below Average Percentage of Result.

The figure 2 and Table 3.40 indicate that heads of schools showing below average percentage of result regard institutional environment as the major factor for affecting the consistency of results. The scale value of the factor is 1.90. The ability of students is second factor with scale value of 1.47 and teachers expression is the third factor with the scale value of. 1.24. The teachers style of dealing with the child and seriousness among the students are fourth and fifth factors with scale value of 1.08 and 0.89 respectively as viewed by heads working in schools showing consistently below average percentage of results. The other ranked factors were as such:

VI   Teachers qualification

VII   Locality of School

VIII   Teachers General Ability

IX   Adequate Equipment

X   Students of Educated Parents

XI   Teachers fund of knowledge

XII   Students belonging to Rich Families

XIII   Building of School

XIV   Economic Conditions

XV   Effective Leadership.

Reviewing the results obtained on the basis of scale values, there appears to be much consensus among the heads of two types of schools. The three factors viz. Ability of the Students, Teachers' expression and Teacher's style of dealing with the child are common in maintaining consistency of results But the difference lies in showing good and bad results. The Heads working in schools showing above average results consider Teacher's ability and knowledge of the teachers as two other

important factors. It is true that such Heads have perhaps been successful in showing good results with the help of good and effective teachers. The delivery of the lecture by the teacher in the classroom situation plays a pivotal role in making the child attentive. It is the teacher who makes the child serious for his studies to show better results.

The Heads working in schools showing below average results pay more premium on the institutional environment followed by another different variable i.e. seriousness among students. It is true if the atmosphere of the institution is attractive, challenging and motivating, it will make the students serious in their studies. It is believed that lack of such facilities in the school makes the results to fall consistently below the standard.

The differences in proportions of the views of Heads belonging to two types of schools were further tested on each factor with the help of critical ratio. The critical ratio for finding out differences in the proportions of the heads revealed that only one C.R. was found significant. The significant C.R. of 2.94 was obtained only for institutional environment. It was believed that Heads belonging to two different types of schools show differences in their percept. The heads belonging to schools showing poor results pay more premium to this factor in comparison to the heads of other schools. They have already placed it at first rank in order of preferences. According to them, this is the most patent factor and lack of enriched institutional environment continue to badly affect the results of the students. There were no significant differences in the proportions of heads belonging to two type of schools on all other remaining factors. Thus the hypothesis No.3 that there may be significant differences

in the proportions of the views of heads of schools showing
above and below average results can not be accepted.

Section IV

Mean Differences:

A. Mean differences in competency scores of trained and
untrained Teachers belonging to Schools showing Above
and Below Average Percentage of Results:

Main Effects:

The calculated F-ratio is far less than the table value
of 3.94 against 1 and 96 df with $\alpha = 0.05$. It shows A, i.e.
trained and untrained teachers do not differ significantly from
each other. The mean scores of trained teachers is 108.98 and
mean score of untrained teachers is 176.56. Whatever the
difference exists is because of sampling fluctuations. In
other words, we can say that training of teachers is independent
of their competency in teaching. The hypothesis of significant
differences in competency of teachers(trained and untrained)
is/accepted. The calculated value of F for main effect of B
not
is 19.09 which is far higher than the table value. This shows
that type of schools as a single main variable shows significant
difference on teaching competency of the teachers. It shows
that the means of two levels of B differ from each other. The
mean score of B_1 i.e. schools showing consistently above
average results is 200.54 and mean score of B_2 i.e. schools
showing consistently below average results is 157.03. The mean
scores of B_1 is higher than the mean scores of B_2 on teacher
competency scores. It leads us to conclude that teachers of
schools showing above average results are more competent than
the teachers of the schools showing below average results.
Hence, the competency of teachers cannot be said to be indepen-
dent of type of schools. The hypothesis of significant differ-
nce in the competency of teachers belonging to different types
of schools is accepted.

Interaction:

The interaction for AxB i.e. training of teachers and type of results in competency scores of teachers is not significant. The calculated F-ratio is far less than the required F-ratio. The fact that this interaction mean square is not significant indicates the difference between the means of A_1 and A_2 for the first level of B is not significantly different from the difference between the means of A_1 and A_2 for the second level of B. In other words when AxB sum of squares were equal to zero, then the difference in the mean competency scores of trained and untrained teachers in schools showing above average results would be equal to the difference between the mean competency scores of trained and untrained teachers in schools showing below average results. Henceforth, we can say that training is independent of type of results in relation to competency of teachers. The hypothesis of significant two factor interaction can not be accepted.

B. Mean differences in different areas of Teacher Adjustment in relation to Locality, Economic Conditions and Type of Results:

Main Effects:

From Table F we find that a F-ratio of 3.95 will be significant against df 1 and 92 df with α = 0.05. We find that calculated F-ratios for A i.e. urban (A_1) and rural (A_2) localities on different areas of teacher adjustment viz. Health Home-Social, Economic, Institutional and Ethical are 1.96, 1. 1.48, 0.001 and 0.14 respectively. All these F-ratios of on different areas of teacher adjustment are less than the F-ratio of 3.95 required for significance at 0.05 level. This indicates that the difference between the locality of teacher has no effect on their health, home-social, economic, institu ional and ethical adjustment. In other words, we can say the locality of teachers is independent when different areas of

adjustment are taken as dependent variable. Thus the hypoth si of significant difference in the adjustment of teachers of different locality can't be accepted.

Factor B includes the effect of two levels of Economic status of teachers i.e. high economic status (B_1) and low economic status (B_2) on different areas of teacher adjustment. Calculated F-ratios on health, home-social, economic, institutional and ethical adjustment of teachers in relation to their economic status are 0.31, 0.00, 0.76, 0.67 and 1.98 respectively. These values are less than the F-ratio of 3.95 required for significance against 1 and 92 df at 0.05 level of significance. This indicates that the difference between economic status of teachers is insignificant on different areas of their adjustment. In other words we can say that high and low economic status have no affect on health, home-social, economic, institutional and ethical adjustment of teachers. It can be further conclude that economic status of teachers is independent of their adjustment in different fields. The adjustment of teachers does not get affected by the economic position of the teachers. The teachers seem to be satisfied with their economic sailing. Thus the hypothesis of significant difference in mean adjustment scores of teachers of different economic status can't be accept

The calculated F-ratios of 0.86, 3.25, 0.77, 2.82 and 2.74 on health, home-social, economic, institutional and ethical adjustments respectively for main effects of C i.e. schools showing consistently above average results C_1 and schools showing consistently below average results C_2 are less than the F-ratio of 3.95 required for significance against 1 and 92 df with $\alpha = 0.05$. This shows that the difference between type of results has no significant effect on different areas of adjustment of teachers. It reveals that there are no real differences in the mean scores of adjustment of teachers

showing good and bad results. If any difference exists it may due to sampling fluctuations. Hence, we can say that type of results has no impact on different areas of adjustment of teachers viz. health, home-social, economic, institutional and ethical. In other words it can be said that type of results is independent when adjustment of teachers in different areas is taken as a dependent variable. Thus, the hypothesis of significant difference in the adjustment scores of teachers belonging to different types of schools can't be accepted.

Interaction:

The interaction for AxB i.e. locality of teachers an economic status on different areas of adjustment is not signi cant. The calculated F-ratios of 1.86, 0.24, 0.0007, 2.91 and 0.0004 on health, home-social, economic, institutional and ethical adjustments are far less than the F-value of 3.95 required for significance against 1 and 92 df with $\alpha = 0.05$. The fact, that this interaction is not significant indicates that difference between means of A_1 and A_2 for the first level of B is not significantly different from the difference between A_1 and A_2 for the second level of B on different areas of teacher adjustment. Henceforth, we can say that urban and rural teachers are independent of their economic status when adjustment of teachers in different areas (health, home-social economic, institutional and ethical) is taken as dependent variable. The hypothesis of significant interaction is reject for AxB interaction on adjustment scores.

The interaction for AxC i.e. two levels of locality of teachers and two levels of result are not significant on different areas of teacher adjustment. The calculated F value of health, home-social, economic, institutional and ethical adjustments are less than the F value of 3.95 required for significance with $\alpha = 0.05$. This indicates that urban (A_1)

and rural (A_2) teachers with respect to above average and below average results do not differ significantly in adjustment of teachers in different areas. This shows that mean differences between A_1 and A_2 for the first level of C are not significantly different from the differences between the means of A_1 and A_2 for second level of C. In other words, we can say that urban and rural teachers are independent of showing above average and below average results when adjustment of teachers in different area (health, home-social, economic, institutional and ethical) is taken as a dependent variable. The hypothesis of significant interaction (AxC) on adjustment scores cannot be accepted.

The F-ratios for the interactions between BxC i.e. two levels of economic status of teachers and two types of results are insignificant on health, economic, institutional and ethical adjustments of teachers. The calculated F-ratios for these adjustments are less than the required F-value of 3.95 against df 1 and 92 with $\alpha = 0.05$. The insignificant interactions convey that high economic and low economic status of teachers with respect to good and bad results do not exhibit any difference as regards their health, economic, institutional and ethical adjustments. In other words, we can say that economic status of teachers is independent of type of results when these four areas of teacher adjustment are considered as dependent variables.

The F-ratio for the interaction between BxC on home-social adjustment of teachers came to be 4.13 which is high than the required F-ratio of 3.95 for significance at 0.05 level of significance. The significant interaction conveys that high economic status and low economic status of teachers is not same with respect to above average and below average results in home-social adjustment of teachers. In other words the magnitude of difference between high economic and low economic status of teachers is not same within the limits of random variation for

teachers in schools showing above and below average results. In other words it leads us to conclude that different economic status is not independent of type of results when home-social adjustment of teachers is taken as a dependent variable. Thus the hypothesis of significant interaction (BxC) for only one area (home-social) of adjustment is accepted whereas for other four areas of adjustment, it can't be accepted.

Lastly, the F-ratios for the interactions between AxBxC were found to be less than the table value on health, home-social, economic and ethical adjustments respectively. Thus, all these values are not significant. The interpretation made thereof is that these three factors i.e. (urban and rural locality, high and low economic status and above and below average results) when made to work jointly do not reveal any difference in these four areas (health, home-social, economic and ethical) of adjustment of teachers.

The F-ratios for the **three factor** interaction of AxExC on institutional adjustment was found to be 3.95 which is significant 0.05 level of significance. This indicates these three factors when made to work together reveal significant difference at 0.05 level on institutional adjustment of teachers. It shows the adjustment of teachers in a school gets effected by locality, economic status and type of results. Thus, the hypothesis of three factors (AxBxC) interaction on adjustment scores of teachers is accepted in case of institutional adjustment. In other four areas of adjustment, this hypothesis can not be accepted.

C. Mean Differences in different Areas of Teacher Adjustment in relation to Sex, Type of result and Competency of Teachers:

Main Effects:

The F-ratios for A i.e. two levels of sex - Male(A_1) and Female (A_2) on different areas of adjustment viz. health,

home-social, economic and institutional are not significant. The calculated F-ratios for these four areas of teacher adjustment are less than the table value. This indicates that male and female teachers do not differ significantly on health, home-social, economic and institutional adjustment. In other words, we can say that sex of teacher remains independent when adjustment of teacher in four areas (health, home-social, economic and institutional) of adjustment of teachers is considered as dependent variable.

The calculated F-ratio for A i.e. male and female teachers on ethical adjustment came out to be 5.78 which is significant at 0.05 level of significance. It indicates that sex has an impact on the ethical adjustment of teachers. In other words we can say that sex of teachers is not independent variable when ethical adjustment of teachers is considered as a dependent variable. The male and female teachers differ on ethical adjustment. Thus the hypothesis of significant difference in teacher adjustment in relation to sex is accepted in the area of ethical adjustment. In other four areas of adjustment it can't be accepted.

The F-ratios for the main effects of B i.e. type of result above and below average on five areas of teacher adjustment namely health, home-social, economic, institutional and ethical are insignificant. This indicates that type of results has no effect on teacher adjustment. It also shows that no real difference exists between type of result and adjustment of teachers. Further, it leads us to conclude that type of results is independent when adjustment of teachers in different areas is taken as dependent variable. The hypothesis of significant difference in teacher adjustment in relation to type of schools can't be accepted.

The calculated F-ratios for C i.e. competent (C_1) and

non-competent(C_2) teachers on health and home-social adjustm
of teachers are greater than table values. These two calcul:
F-ratios of 7.33 and 5.53 in health and home-social adjustmer
are significant at 0.01 and 0.05 levels of significance respe
tively. It thus, indicates that competent and non-competent
teachers significantly differ from each other on health and
home-social adjustment.

On the other extreme, F-ratios of 3.74, 1.52, and 1.
on economic, institutional and ethical adjustment respective
are insignificant as all fall short of required F-ratio of 4
for significance at 0.05 level. This indicates that compet
and non-competent teachers do not differ significantly with
respect to their economic, institutional and ethical adjust
It further leads us to conclude that competency and non com
ncy are not dependent when economic, institutional and ethic
adjustment are taken as dependent variables. The hypothesi:
significant difference in teacher adjustment in relation t
their competency is accepted in areas of health and home-soc
adjustment. In other three areas of adjustment, this hypoth
can't be accepted.

Interactions:

The F-ratios for interaction between AxB i.e. male
female teachers, and above and below average results on fiv.
different areas of teacher adjustment viz. health, home-soc
economic, institutional and ethical are insignificant. The
calculated F-ratios in these different five areas of adjust
are 2.50, 0.39, 1.55, 0.39 and 2.07 are less than the F-rati
from table value of 4.00 against df 1/87 with $\alpha = 0.05$. This
means that there are no real differences between the mean s
of male and female teachers showing above and below average
results on these five adjustments. If any difference exist.
may be due to sampling fluctuations. Hence sex of teachers

not related with type of results on their adjustment. In
other words, we can say that sex and type of results are inde-
pendent when we talk of adjustment of teachers in different
areas (health, home-social, economic, institutional and ethical,
as dependent variable. The hypothesis of significant interact.
(AxB) is not accepted.

The interaction for AxC i.e. male (A_1) and female (A_2)
teachers and competent (C_1) and non-competent (C_2) teachers are
not significant on all the five areas of teacher adjustment.
The calculated F-values of 0.00, 0.00, 3.68, 0.03 and 0.36 in
health, home-social, economic, institutional and ethical adjust-
ments are less than the required F-value for significance. This
reveals that there is no real difference between sex and
competency of teachers on all the five areas of adjustment. It
also indicates that differences between means of A_1 and A_2 for
the first level of C are not significantly different from the
mean differences of A_1 and A_2 for the second level of C. Hence
forth, we can say that sex of teachers is independent of their
competency when adjustment of teachers in five different areas
are taken as dependent variable. The hypothesis of significant
interaction (AxC) can not be accepted.

The F-ratios for the main effects of interaction of BxC
on health, home-social, economic, institutional and ethical
adjustment of 1.42, 1.19, 0.71, 1.13 and 0.24 are far less than
table value of F for significance at 0.05 level of significance.
It is thus evident that no value on each of the five areas of
adjustment is significant. The insignificant interaction
conveys that above average (B_1) and below average (B_2) results
and competent (C_1) and non-competent (C_2) teachers do not exhibit
any difference on all the five areas of adjustment. This
further mean that the differences between means of B_1 and B_2
for the first level of C are not significantly different from

the difference between means of B_1 and E_2 for the second level
of C. In other words type if result of teachers is independent
of their competency when adjustment in different areas is taken
as a dependent variable. Thus, the hypothesis of significant
interaction(BxC) cannot be accepted.

AxBxC: The F-ratio for second order interaction between AxBxC
were found to be 237.92, 9.11, 4.98 and 27.45 on health, home-
social, economic and institutional adjustment. These values
are far above the table value and hence they are significant.
The significance F-ratios convey that sex, type of results and
levels of competency when work jointly do influence the above
adjustments.

The F-ratio for second order interaction between AxBxC
was found to be 2.10 on ethical adjustment which is less than
table value of 3.95. It means the second order interaction is
insignificant. The hypothesis of significant three factor
(AxBxC) interaction in four areas of teacher adjustment viz.
health, home-social, institutional and economic is accepted.
However, in one area of adjustment viz. ethical, this hypothesis
can not be accepted.

D. Mean differences in competency scores in relation to
experience, qualification and type of Results:
Main Effects.

The calculated value of F is 14.76 which is far higher
then the table value and concludes the significance of the main
effects of A i.e. levels of experience. It shows that the mean
competency scores of two levels A_1 and A_2 i.e. highly experienced
and low experienced teachers respectively differ from each other.
The mean scores of A_1(316.69) is less than the mean score of
A_2(403) on teacher competency scores. It further leads us to
conclude that teachers having less teaching experience are more
competent than the teachers having higher teaching experience.

Hence, the competency of teachers can not be said to be independent of their range of experience. It reveals the competency teachers can not be built through years but it is the original potential of the teacher which matters. The hypothesis of significant difference in the teacher competency scores in relation to their experience is accepted.

The calculated value of F-ratio is far less than the table value of F for main effect of B i.e. qualification. It shows Post-graduate (B_1) and under-graduate (B_2) teachers do not differ from each other. It shows there is no real difference in the mean scores of post-graduate and under-graduate teachers in relation to their competency in teaching. In other words, we can say that qualification of teachers is independent of their competency in teaching. The hypothesis of significant diff in the competency scores of teachers in relation to their qualifications can not be accepted.

The F-ratio for the main effect of C i.e. above average and below average results is significant with $\alpha = 0.01$. The calculated value of F is 17.53 which is far higher than the table value. It shows that the means of two levels C_1 and C_2 differ from each other. The mean scores of C_1 i.e. schools showing consistently above average results is 407.18 and the mean scores of C_2 i.e. schools showing consistently below average results is 312.18. The mean scores of C_1 is higher than mean scores of C_2 on teaching competency scores. It further leads us to conclude that teachers working in schools showing above average results are more competent than the teachers of the schools showing below average results. Hence the competency of teachers can not be said to be independent of type of schools. The hypothesis of significant difference in the competency scores of teachers in relation to the type of results is accepted.

Interaction.

The interaction for $A \times B$ i.e. levels of experience (A_1 & A_2) and levels of qualification (B_1 & B_2) on competence scores of teachers is not significant. The calculated F-ratio is far less than required F-ratio. The fact that this interaction of mean squares is not significant indicates the difference between the means of A_1 and A_2 for the first level of B is not significantly different from the difference between means of and A_2 for the second level of B. Henceforth, experience is independent of qualifications in relation to competency of teachers. The hypothesis of significant ($A \times B$) interaction can not be accepted.

The F-ratio for interaction between $A \times C$ i.e. two levels of experience (A) and two levels of results (C) is far higher than the calculated value, which means interaction is significant. The significant interaction conveys that high experience (A_1) and low experience (A_2) levels of teachers are not same with respect to above average (C_1) and below average (C_2) results on teacher competency scores. In other words magnitude of the difference between high and low experienced teachers not the same within the limits of random variation for school showing above and below average results. This further leads us to conclude that experience is not independent of type of results when competency of teachers is taken as a dependent variable. The hypothesis of significant ($A \times C$) interaction accepted.

The F-ratio for interaction between $B \times C$ i.e. two levels of qualification (B_1 and B_2) and two levels of results (C_1 is higher than the calculated value which mean interaction significant at 0.05 level of significance. The significant interaction conveys that post-graduate teachers (B_1) and undergraduate teachers(B_2) is not the same with respect to above

average (C_1) and below average (C_2) results on teacher competency scores. In other words magnitude of the difference between post-graduate and under-graduate teachers is not the same within the limits of random variation for schools showing above and below average results. This further, leads us to conclude that qualification is/independent of type of result when competency of teachers is taken as a dependant variable. The hypothesis of significant two factor (BxC) interaction

is accepted.

F ratio for AxBxC interaction is not significant.

Section IV

Correlation:

The co-efficient of correlation based on r_{bis} between competent and non-competent teachers with total adjustment s was found to be 0.25, which is insignificant. The required v of r_{bis} for significance at .05 level is 0.304 against df of This indicates low degree of positive correlation between two groups. It also indicates that there is little association between competent and non-competent group of teachers in relat to total adjustment scores. In other words, we can say that competency and non-competency of teachers is independant of their adjustment in classroom situation. Thus the hypothesis of significant positive correlation between scores of teach adjustment and competency of teachers can not be accepted. main findings and conclusions arrived on the basis of the results are given in next chapter.

CHAPTER - V

General Conclusions, Educational Implications, Limitations and Suggestions for further Research.

A.   Conclusions Based on Organisational Pattern.

In the light of analysis and interpretation of the data already discussed in chapter-iv, the following conclusions are drawn.

1.   The average number of teachers, both trained and untrained are more in the schools showing consistently above average results (category A), as compared to the institutions showing below average results (category B).

2.   The work load of the teachers working in schools showing consistently above the average results is less in comparison to the schools showing below average results.

3.   Average experience of the heads is more for the heads of category A in comparison to category B in institutions in which they are serving at present. The total experience of the heads in schools of category A is less than that of category B.

4.   Regarding the location of the school, it was found that.

   i)   More percentage of the institutions of the category A, are situated in urban area;

   ii)   Less percentage of the institutions of the category A, are situated in the rural area.

   iii). More percentage of the institution of the category A, are situated in the main market.

   iv)   Less percentage of the institution of the category A, are situated on the road side.

   v)   Students have to cover less distance to reach the institutions of category A.

   vi)   More institutions of category A provide bus facility and local bus facility.

5. Regarding the building of the institution, it was found that:

   i) More percentage of the institutions in category A, have pacca buildings as compared to institutions of category B;

   ii) There is no kacha school building either for category A or B;

   iii) The category C has more mixed type of buildings;

   iv) The institutions of category A have more planned buildings in which classes and laboratories are situated at one place, as compared to the institutions of the category B;

   v) More institutions of the category A in comparison to the institutions of category B, have better dispensary, library, laboratories, science rooms, staff room, auditorium, study hall, craft room, canteen, lavatory etc.

   vi) All the institutions of category A and B have separate office for head.

   vii) More percentage of the institutions in category A have separate office for clerk.

   viii) All the institutions of category A & B get their school building white washed. The frequency of white washing is yearly in both the categories.

6. Regarding the drinking water facility, electricity lighting facility, heating facility in winter and fan facility in summer, it was found that:

   i) The institutions of both the categories have drinking water facilities but the mode of providing water is different.

   ii) More percentage of the institutions have electric lighting arrangement in every classroom in category A as compared to category B.

   iii) More percentage of institutions have heating facility in winter in Category A, and its mode is mainly through electricity and coal.

   iv) The percentage of the institutions is more in category A having fan facility. The presence of fan in every classroom is more in category A.

7. Regarding the classrooms it was found that:

   i) Average size of classroom is bigger in category B in comparison to category A.

   ii) Average number of classrooms is more in category B as compared to the institutions of category A.

iii) The percentage of the classrooms having more ventilators is more in the institutions of category A as compared to the institutions of category B.

iv) There is more percentage of the institutions in category A, where classes are divided into sections.

v) Average number of sections made of a class is more in the institutions of category A.

vi) There is more percentage of the institutions in category A having separate classrooms for each section.

8. Regarding hardwares, it was found that:

i) There is more percentage of the institutions of category A having notice board.

ii) All institutions of category A and B have black-boards. Black-boards are fixed in more institutions of category A.

iii) Average number of chairs in staffroom, office, classrooms and desks in classrooms are more in the institutions of category A, as compared to institutions of category B.

9. Regarding the school records, it was found that:

i) All the institutions of category A and B have register for admission and withdrawl of students, attendance register for teachers and students and a copy of syllabus.

ii) Less percentage of the institutions of category B, have a diary of weekly programmes.

iii) More percentage of the institutions of category A, have a copy of records of students progress, secrecy books and register for punishment.

iv) Almost all the institutions of category A and B have accounts book, file for each staff member, but the file for students and file for purchases is more in the institutions of category A.

10. Regarding the teaching aids, it was found that:

i) There is more percentage of the institutions of category A which use models and maps as teaching aids, and in which models are in working order.

ii) The institutions of both the categories have globe and charts.

11. Regarding the co-curricular activities, it was found that:

i) There is more percentage of the schools in category A, where debate, declamation, quiz, Music Competition, Dances, Poetic symposium, Painting competitions, Science fairs etc. are organised in comparison to schools in category B.

    ii)   There is more percentage of the schools in category B which organise co-curricular activities either after six months or on specific days.

    iii)   There is more percentage of the schools in category A, where teachers take part in co-curricular activities, students get reward, Rewards are in the form of prizes and more library facilities are provided then in category B

12. Regarding Moral Education

    i)   It was found that there is more provision within schools of category A where moral education is provided. It is prescribed more in morning assembly by Headmaster, sometimes by external person and moral education given is more effective in institutions of category A then in category B. But students participate equally in moral education lessons in the schools belonging to both the categories.

B. Conclusions Based on Administrative Style of Heads of Schools

There is no significance of differences in the administrative style of the heads of working in two different types of schools. The significance occurs only on item 37 "Themselves prepare the estimates of expenditure for coming calendar years", where x^2 value is significant at 0.05 level

The economic condition of schools of category A is better then those belonging to category B as revealed by the figures of grant, revenue and expenditure per year of both types of schools.

C. Conclusions Based on Views of Heads:

The Heads in schools showing consistently above average percentage of results ranked first five positions to the factors affecting the matriculation results consistently for last five years as:

    i)   Ability of the students
    ii)   Teachers style of dealing with child
    iii)   Teachers expression
    iv)   Teachers General Ability
    v)   Teachers fund of knowledge.

The Heads working in schools showing consistently below average
percentage of result assigned first five ranks to the following
factors:

     i)   Institutional Environment

    ii)   Ability of the students

   iii)   Teachers Expression

    iv)   Teachers style of Dealing with Child

     v)   Seriousness among students.

D.   Conclusions on Mean Differences:

    I. Differences in mean teaching competency scores
       in relation to their training and type of result :

1.   The F ratio between trained and untrained teachers
on teaching competency scores is insignificant.

2.   The F ratio for above average and below average
type of results was found to be significant when
competency of teachers was a dependant variable. It
showed that competency of teachers influence the
type of results.

3.   The F ratio for interaction between levels of
training and types of results (AxB) came out to be
insignificant when competency of teachers was a
dependant variable.

   II.   Differences in mean adjustment scores of Teachers
       in relation to their locality, economic status and
       type of results:

1.   The F ratios for the main effects of two levels
of economic status of teachers, two types of results
and two levels of locality were found insignificant
on all the five areas of teachers adjustment viz.
health , home-social, economic, institutional and
ethical.

2.   The F ratios for first order interaction between
locality and economic status (AxB), locality and type
of results (AxC) were found to be insignificant on all

the five areas of adjustment i.e. health, home-social,
economic, institutional and ethical.

3. The F ratio for first order interaction between
economic status and type of results (BxC) was found to
be insignificant on four areas of adjustment viz.,
health, economic, institutional and ethical. But
the same interaction showed significant differences
in home-social type of adjustment.

4. The F ratio for the second order interaction
between locality, economic status of teachers and
type of result (AxBxC) on institutional adjustment was found
significant, whereas it showed no significant differences
on other four areas of adjustment.

III. Differences in mean adjustment scores of teachers in
relation to their sex, type of results & teaching
competency:

1. The F ratio for sex (A) was found significant on
ethical adjustment. It means there were significant
differences in ethical adjustment of male and female
teachers. The F ratio for sex on other areas of
adjustment showed no significant differences.

2. The F ratio for type of results (B) was found
insignificant on all the five areas of adjustment.
It means schools showing results above average percen-
tage and below average percentage were not affected by
any of the areas of teacher adjustment.

3. The F ratio for levels of competency(C) were
found to be significant as regards their health and
home-social adjustment. It means that competent and
non-competent teachers differ from each other in health
and home-social adjustment. No significant difference
was observed in F ratios for economic, institutional and
ethical adjustment.

4. Differences in health, home-social, economic, institutional and ethical adjustment were independent of joint influence of levels of sex and type of the result shown by each school (AxB).

5. The F ratio for first order interaction between sex and levels of competency of teachers (AxC) was found insignificant in all the five areas of adjustment.

6. Differences in health, home-social, economic, institutional and ethical adjustment of teachers were independent of the joint influence of type of results and levels of competency of teachers (BxC).

7. The F ratio for the second order interaction between sex, type of results and competency of teachers (AxBxC) were found significant at 0.01 level in health, home-social, economic and institutional adjustment, whereas in the same interaction, no differences was found in ethical adjustment.

IV. Differences in mean teaching competency scores of teachers in relation to their experience, qualification and type of results.

1. The F ratio for levels of experience (A) was found to be significant at 0.01 level when competency scores of teachers was taken as a dependant variable.

2. The F ratio for qualification (B) was found to be insignificant. It means qualification has no role in making the teachers competent.

3. The F ratio for type of results (C) was found to be significant when competency scores of teachers was taken as a dependant variable. It means schools showing result above and below average have differences in competency of teachers.

4. The F ratio for first order interaction between experience and qualification (AxB) showed no significant differences in competency of teachers.

5. The F ratio for first order interaction between experience and type of results (AxC), qualification and type of results (BxC) showed significant differences in competency scores of teachers.

6. The F ratio for second order interaction between experience, qualification and type of results (AxBxC) jointly showed no significant difference in competency scores of teachers.

V. Conclusion based on biserial correlation of adjustment scores of competent and non competent teachers:

1. The relationship between competency of teachers and their total adjustment scores was found to be insignificantly low positive.

B. Educational Implications:

1. The findings and conclusions of the present study indicate that in the institutions showing consistently above average results (category A), there is more trained staff and average work load if the teachers is less as compared to the institutions showing consistently below average results (category B). This shows that qualification, training and work load plays a significant role in enhancing the performance of the students because qualified teachers are rich in content and training and more work load on the part of the teachers may adversely affect teaching.

In view of findings, it is suggested that trained teachers should be appointed in the institutions and work load of the teachers should not be more.

2. It is evident that more institutions of the category B are situated on the road side where local bus facility is

available and these institutions also provide school bus facility. It may, therefore, be suggested that institutions should provide school's bus facility for the students.

3. More institutions of the category A, have pacca building and planned building in which classrooms, laboratories are situated at one place. Also more institutions of this category have dispensary, library, laboratories, science room, staff room, auditorium, study hall, craft room, garden, canteen, play ground, common room and separate room for the clerk.

It is an admitted fact that building plays a major role in making the institutional climate of the institution congenial for the growth and development of the students. In view of these findings, it is suggested that the Government as well as other voluntary organisations should take some concrete steps for constructing planned buildings for the institutions.

4. The findings indicate that more institutions of the category A have electric lighting arrangement and fan facility in every class-room as compared to the institutions of the category B.

It may, therefore, be suggested that institutions should have electric lighting arrangement and fan facility in every classroom.

5. It is evident from the findings that the more classes are divided into sections, average number of sections made of a class is more and number of students in each section is less in the institutions of the category A.

It may, therefore, be suggested that there should be provision of segregating class into three sections and number of students in one section should be less to pay more individual attention to the students.

6. The average number of chairs in the staff-room and desks in the class-rooms is more in the institutions of the

category I, than B. It may, therefore, be suggested that there should be appropriate number of desks and chairs in the class-rooms and in the staff-rooms respectively.

7.   The findings indicate that more institutions of the category I, have a copy of record of students progress and log book. Again, records are checked regularly in the institutions of category I.

,It may, therefore, be suggested that not only school records be maintained but these records should also be checked regularly.

8.   It has been found that participation in cocurricular activities is compulsory in more institutions of the category I, than B. In more institutions of the category A, picnics and camps are organised and teachers co-operate students in outings. Further, more institutions of the category I, celebrate the important days like Teacher's day, Children's day, Sport's day, Flag day, Mother's day and organise Annual functions.

lt may, therefore, be suggested that institutions should have provision of cocurricular activities and participation in them should be compulsory. Games, picnics, should be organised and teachers should co-operate students in outings. All the institutions should celebrate the days of national importance, annual functions and should participate in Inter-School Competitions and games.

9.   It is evident from the findings that more institutions of the category I, have the provision of giving moral education to the students. It may, therefore, be suggested that all the institutions should have the provision of giving moral education to the students.

In view of the findings, it may, therefor , be suggested that heads of the institutions and teachers should provide opportunities to the students for participating in various activities and there should be provision of giving rewards,

Again, parents of the students should also be informed about their children's performance.

The effective leadership should be provided in both types of schools to make the administration and supervision of work more scientific and useful. There should be checks on the administrative style and functioning of heads. The Heads believe that teacher's quantum of knowledge and his expression is very important in making the teaching learning process effective. In selections, the teachers of dedicated spirit, having knowledge of subject matter and capacity to communicate proper delivery should be selected.

There has occurred a great deviation in two types of schools. The schools have definite characteristics and peculiarities because of which they show differential results. This problem should not occur in Govt.Schools where uniform practices and conditions are adopted. The sex and competency are two other important factors which show deviation in two types of schools. The teachers of good schools have proved to be competent. Almost all the good schools fall in urban areas or important rural places, nearest to the cities, where trained and efficient teachers are often provided. But it is against natural justice. The government should provide trained and efficient staff in schools in remote areas also.

F. Limitations:

1. In the present problem, the study was confined to the secondary and higher secondary teachers of few selected schools only.

2. In a big population of teachers, only 100 teachers were selected.

3. Teachers from colleges, middle and primary schools could not be taken.

4. Th present study is confined to th results of matriculation class for last five years of J&K Board.

5. The reliability of th tools was not ascertained as it was not the objective of this study.

6. Two standardized tools viz. teacher adjustment inventory and teacher competency scale were only used.

7. Th student could not b made part of th study.

8. Some other variables, which might affect th result, have not b en controlled.

9. Suggestions for further study

Th following suggestions may be incorporated for further studies:

1. The study can be conducted on a large sample.

2. The other variables like emotional adjustment, job-satisfaction, ability of the students can b incorporated.

3. Such studies can be undertaken at college and primary school levels as well.

4. Influence of other cognitive and non-cognitive factors can be explored on th schools showing consistent type of results.

5. A study may be undertaken to compare the institutional climate of schools showing good and bad results.

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SCHOOLS OF JAMMU PROVINCE SHOWING CONSISTENTLY ABOVE AVERAGE AND BELOW AVERAGE RESULTS (WITH YEARWISE RESULT PERCENTAGE) FOR THE LAST FIVE YEARS IN MATRICULATION EXAMINATION OF J&K BOARD OF SCHOOL EXAMINATION

A.   SCHOOLS SHOWING ABOVE AVERAGE RESULTS

S. No.	Name of the School	Yearwise Result Percentage					Overall result percentage
		1980	1981	1982	1983	1984	
1.	Govt.H.S. Majalta(Udhampur)	91.67%	78.78%	75%	53%	73.7%	74.43%
2.	Govt.H.S. Thial(Udhampur)	80.95%	70.85%	51.69%	52.93%	74.5%	67.18%
3.	Nehru Memorial Academy, Udhampur.	83.78%	100%	100%	100%	100%	96.75%
4.	D.A.V.High School, Udhampur	100%	90%	90.47%	87.5%	81.81%	73.65%
5.	Govt.Girls,H.S.S., Udhampur	72.15%	80.70%	75%	57.60%	53.11%	67.71%
6.	Govt.Girls, H.S. Chenani	100%	52%	58.33%	59.00%	100%	73.88%
7.	Govt.H.S. Thuroo(Mahore)	100%	54.45%	93.33%	77.78%	80%	81.11%
8.	Vivek Niketan, Udhampur	100%	58.37%	100%	70%	90.90%	83.85%
9.	Govt.Girls H.S., Basholi	60%	81.25%	64.70%	100%	73.68%	75.92%
10	Govt.H.S.Koheg (Billawar)	58.82%	81.25%	53%	66.67%	71.42%	66.23%
11	Govt.Girls H.S. Billawar	83.33%	100%	100%	81.25%	72.72%	81.46%
12	Govt.H.S.S. Mohanpur	53.75%	56%	67.67%	72.50%	79.31%	65.84%
13	Govt.H.S.Mara (Billawar)	66.67%	87.5 %	62.5 %	60%	71.42%	69.62%
14	M.L.H.S.S. Kathua(Boys)	58.62%	80.82%	67.74%	53%	72.16%	66.47%
15	Jagriti Niketan, Kathua	54.45%	94.12%	65%	90.9 %	95%	79.89%
16	Govt.H.S., Lakhanpur	61%	81.25%	70%	54.85%	70%	67.42%
17	Govt.Girls H.S., Gagwal	52.95%	57.69%	65.21%	55%	76.92%	61.51%
18	Govt.H.S., Chann Rorian	60%	69.56%	55%	54.26%	84.61%	64.69%
19	Govt.Girls H.S. Hiranagar	75.6%	68.52%	53%	88.89%	100%	77.2%
20	Govt. H.S., Sallan	66.67%	55%	53.84%	53%	94.44%	64.59%

S. No.	Name of the School	Yearwise Result Percentage					Overall result percentage
		1980	1981	1982	1983	1984	
21.	Govt.H.S. Kootah	95.83%	62.5%	72.72%	56.58%	54.17%	68.36%
22	Govt.Girls H.S, Kootah	100%	53%	72.72%	66.67%	52.99%	69%
23	Govt.Girls H.S., Sunder Bani (Rajauri)	100%	86.36%	59.37%	68.95%	63.15%	75.57%
24	Govt.H.S.,Channi-Prat(Nowashra)	80%	70%	58.38%	78.57%	71.42%	71.67%
25	Govt.H.S.Cambiri (Nowashra)	56.25%	85.71%	61%	56.52%	52.98%	62.49%
26	Govt.Girls H.S. Nowoshra	55%	72.72%	65%	90%	85.71%	73.69%
27	Govt.Girls H.S.S. Rajouri	77.78%	53%	80.43%	66.67%	58.13%	67.2%
28	Govt.Girls H.S., Samba	74.5%	68.52%	83%	75%	84%	81%
29	Govt.H.S., Sunjwan	68.42%	68.42%	53%	59.57%	54%	60.68%
30	Govt.H.S., Samilpur	92.3%	70%	54%	65.12%	53.11%	66.19%
31	Govt.H.S.Simbal Camp(R.S.Pura)	55%	66.67%	52.55%	60%	89%	64.64%
32	Govt.H.S. Behalwal(Jammu)	53.84%	71.82%	62.56%	64.58%	57.5%	62%
33.	Govt.Girls H.S. Burg Mandir(Jammu)	55%	66.67%	75%	66.67%	100%	72.67%
34	Govt.Girls H.S., Gol Gujral(Jammu)	100%	90%	86.67%	57.14%	63.63%	79.45%
35	Govt.H.S.Bhour Camp(Jammu)	64.28%	53,	**52.63%**	86.67%	**100%**	**71.31%**
36	Presentation Convent School,Gandhinagar (Jammu)	89%	95.95%	95.65%	93.83%	100%	94.89%
37	Luthra Academy Gandhinagar(Jammu)	75.6%	71.87%	73.33%	83.33%	90.62%	78.95%
38	Central Basic School,Gandhinagar (Jammu)	54.58%	58.38%	72%	94.44%	95%	70.89%
39	Govt.Girls H.S. Kachi Chowni	90.32%	63.46%	81.65%	75%	69.56%	75.99%
40	Arya Girls H.S. Kachi Chowni	69%	78.72%	62%	77.5%	65%	70.44%
41	Arya Kanya Vidyalya Purani Mandi	95.95%	95.85%	92%	96.6%	58.82%	87.84%
42	Gurmat Kanya Path-shala, Jammu	89.65%	72%	95.12%	86.2%	62.16%	81%
43	Govt.Girls H.S., Bakshinagar	75.78%	69.44%	73.68%	70.37%	61.67%	70.18%

S. No.	Name of the School	Yearwise Result Percentage					Overall result percentage
		1980	1981	1982	1983	1984	
44	Mahavir Jain H.S. Jammu	93%	100%	66.53%	64.93%	84.48%	59.39%
45	Dewan Badari Nath Vidya Mandir, Jammu	92.55%	97.9%	94.7%	97.15%	94.37%	95.36%
46	Luthra Academy Palace Road, Jammu	73.68%	83.78%	82.6%	67.44%	90%	79.46%
47	Vidya Bidh H.S. Jammu	72.85%	89.47%	100%	92.85%	75.86%	90.2%
48	Luthra Academy Hajrat Road (Jammu)	95%	95.45%	72.27%	100%	96.15%	90.77%
49	Modern Academy Chouta Larbana (Jammu)	97.22%	86.89%	73.52%	92%	84.21%	87.16%
50	Jagriti Nik.tan Jammu	91%	93.4%	57.53%	61%	92.85%	87.16%
51	Oriental Academy	100%	96.96%	96.87%	98.14%	100%	98.14%
52	Light Lous Public School	100%	100%	100%	90.38%	98.15%	97.70%
53	Universal Academy Jammu	85.71%	66.67%		69.23%	84.21%	75.56%
54	Model Academy, Jammu	97%	91%	100%	87.51%	99%	94.87%
55	Shastri Memorial H.S., Jammu	57.14%	100%	64.7%	100%	100%	84.37%
56	Unique Academy Bhartnagar	100%	80%	92.5%	56.25%	95.24%	84.75%
57	New Shastri Memorial H.S. Talab Tillo Jammu	60%	60.6%	47.76%	90.62%	94.28%	80.66%

B. SCHOOLS SHOWING BELOW AVERAGE RESULTS

1.	Govt. H.S. Gharari (Ramnagar)	50%	13.33%	25%	34.5%	41.66%	32.9%
2.	Govt. H.S. Jamla (Udhampur)	zero	9.10%	50%	29%	45.5%	26.72%
3.	Govt. H.S. Jaganoo	42.57%	41.67%	46.15%	48%	40%	43.68%
4.	Govt. H.S. Barulla (	44.44%	37.84%	36%	31.48%	16.67%	32.29%
5.	Govt. H.S.S. Reasi	29.45%	44.74%	48.38%	24.87%	33.33%	36.15%
6.	Govt. H.S.S., Hiranagar	47.62%	24.69%	38.27%	33.64%	26.67%	34.18%
7.	Govt. H.S. Lurran (Poonch)	50%	29.41%	100%	zero	zero	17.88%
8.	Govt. H.S. Loran (Poonch)	20%	zero	zero	zero	25%	9%

S.No.	Name of the School	\multicolumn{5}{c}{Yearwise Result Percentage}	Overall result percentage
		1980	1981	1982	1983	1984	
9.	Govt.H.S.S. Boys (Punch)	33.33%	48.65%	25.11%	35%	43.92%	37%
10	Govt.H.S.Chandak(Punch) (Punch)	7.14%	50%	33.30%	32.25%	16.75%	28.29%
11	Govt.H.S.Chak-Garulan(Rajuri)	zero	48%	19.44%	8.59%	41.42%	23.49%
12	Govt.H.S.Saulki Rajuri	28.57%	38%	50%	25%	4%	29.11%
13	Govt.H.S.Lung a (Nowshera)	zero	5.08%	10%	33.33%	7.67%	11.38%
14	Govt.H.S.S. Nowshera	zero	25.48%	2%	41%	40%	32.4%
15	Govt.H.S.Laghlan (Rajuri)	zero	3.20%	16.67%	28.59%	22.22%	14.13%
16	Govt.H.S.S. Samba	52.70%	27.23%	24.13%	28.42%	45.24%	35.54%
17	Govt.H.S.Chauni Himat	95%	36.88%	47.5%	45.16%	37%	28.95%
18	Govt.H.S.R.hal (Lisharah)	23.61%	25.45%	42.65%	25.80%	17.62%	26%
19.	Govt.H.S.Sai (R.S.Pura)	30.76%	43.36%	45.45%	58%	42%	43.11%
20	Govt.Girls H.S. Badyal Brahmna	28.57%	zero	50%	46.15%	8.33%	26.61%
21 2	Govt.H.S.S.R.S. Pura	13.53%	28%	17.61%	11%	16.53%	17.03%
22	Govt.H.S.Larh	50%	31.25%	51%	56%	35.71%	43.59%
23	Govt.H.S.M. thi	27%	28.57%	25%	16%	17.65%	22.84%
24	Govt.H.S.Kaipur	17.64%	25%	33.35%	40%	16.%	26.39%
25	D...V.H.S.Jammu Kachi Chawani	57.5%	33.30%	1.18%	zero	20%	21.8%

APPENDIX-E

N.C.E.R.T. RESEARCH PROJECT

CHECKLIST

Principal Investigator.

Dr.S.P.Gupta,
Department of Education,
Kurukshetra University,
Kurukshetra.

Co-Investigator.

Dr.Lokesh K.Verma,
P.G.Department of
Education,
University of Jammu,
Jammu

Dear Sir/Madam,

I am writing an NCERT research project entitled,
"Significant Correlates of 084 high schools showing consistently
above and below average results at the board examination for
the last five years". You are requested to fill the appended
pages an oblige. This information will be used for research
purposes only.

I shall be grateful to you for this kind favour,

Yours faithfully,

(RENU SAWHNEY)
Junior Research Fellow,
NCERT Project.

Name of the Institution

I.   Staff

1.   Total number of teachers in the institution.

2.   Number of untrained teachers

3.   Number of trained teachers

   a) B.A.,B.Ed's

   b) B.A.,M.Ed's

   c) B.Sc.,E.Ed's

   d) M.A.,F.Ed's

   e) M.A.,M.Ed's

   f) L.T.'s

   g) Shastri's

   h) Drawing Teachers

   i) P.T.I's

   j) Any other

4.   Average work load of the teachers of
      the following category.

   a) B.A.,B.Ed.

   b) B.A.,M.Ed.

   c) B.Sc.,E.Ed.

   d) M.A.,B.Ed.

   e) L.T.

   f) M.A.,M.Ed.

   g) Shastri

   h) Drawing Teacher

   i) P.T.I.

   j) Any other

5. Total Experience of the Head of the
    Institution   _____

6. Experience of the Head of the institution
    in the present institution.   _____

II. LOCATION OF THE INSTITUTION

7. a) In Urban area   _____

    b) In Rural area   _____

    c) In the main market   _____

    d) On the road side   _____

    e) Any other location   _____

                                                       _ _ _ _ _ _ _ _

                                                       _ _ _ _ _ _ _ _

                                                       _ _ _ _ _ _ _ _

8. Maximum distance students have to
    cover to reach the institution   _____

9. Is school bus facility provided?   Yes/No

10. Is local bus facility available?   Yes/No

11. Do students have their own vehicles?   Yes/No

12. If yes, how many students have their
    own vehicles?   _____

13. Any other provision   _____

                                                       _ _ _ _ _ _ _ _

III. BUILDING OF THE INSTITUTION

14. Is school building

    a) Pacca   _____

    b) Katcha   _____

    c) Mixed   _____

    d) Sheds   _____

    e) Any other   _____

                                                       _ _ _ _ _ _ _ _

                                                       _ _ _ _ _ _ _ _

15. Is school building planned?   Yes/No

17. If no, what is the actual situation? _____

- - - - - - - - - -

- - - - - - - - - -

IV. **FACILITIES IN THE INSTITUTION**

18. Does the institution have:

   a) Dispensary   Yes/No

   b) Library   Yes/No

   c) Laboratory   Yes/No

   d) Science room   Yes/No

   e) Staff room   Yes/No

   f) Auditorium   Yes/No

   g) Study Hall   Yes/No

   h) Room for manual work(craft)   Yes/No

   i) Garden   Yes/No

   j) Canteen   Yes/No

   k) Play ground   Yes/No

   l) Common room   Yes/No

   m) Lavatory   Yes/No

19. Does the institution have separate
    office for

   a) The head of the institution   Yes/No

   b) Clerk   Yes/No

20. Is school building white washed?   Yes/No

21. If yes, when it is white washed?   Yes/No

   a) Half yearly _____

   b) Annually _____

   c) Not fixed _____

22. Does institution has drinking water
    facility?   Yes/No

23. a) By cooler _____

   b) By water taps _____

   c) By tank _____

d) By pitchers _____

e) Any other arrangement _____

24. Does the institution has electric
     lighting arrangement?   Yes/No

25. Is there electric lighting arrangement

     a) in clerk's office?   Yes/No

     b) in the Head's office?   Yes/No

     c) in class rooms?   Yes/No

26. Does the institution has heating facility?   Yes/No

27. Which of the following heating arrangements
     are available in the institution?

     a) Electric heaters   Yes/No

     b) Hot convey-ectors   Yes/No

     c) Fire wood   Yes/No

     d) Coal   Yes/No

     e) Any other arrangement _____

     - - - - - - - - - - - -

28. Does the institution has fan facility?   Yes/No

29. Does every room has facility of fans?   Yes/No

V.   CLASS ROOMS

30. Total number of class rooms in the
     institution   _____

31. Average size of the class room   _____

32. Are classes divided into sections?   Yes/No

33. If yes, what is the basis of classification _____

     a) On the basis of merit   _____

     b) On the basis of sex   _____

     c) On the basis of chronological age   _____

     d) Randomly   _____

     e) Any other criteria   _____

34. Maximum number of students in one section   _____

35. Maximum number of sectionsmade of a class   _____

36. Does every section has got separate room?   Yes/No

37. If no, mention that classes are conducted

   a) in a hall

   b) in verandah   •

   c) in open

   d) Average size of the class room

38. Are classrooms ventilated?

VI.   HARD WARES

39. Does the institution has notice board?   Yes/No

40. Does every class room has a black board?   Yes/No

41. If yes, mention that black boards are:

   a) Fixed

   b) Movable

   c) of both types

42. If there is no provision of black boards, how the students are taught?

   a) On the note books

   b) On the slates

   c) Orally

   d) Any other provision

   - - - - - - - - - - -

   - - - - - - - - - - -

43. Number of chairs in:

   a) the staff room

   b) the office

   c) each class room

44. From which class onward desks are provided?

45. Average number of desks in a class room

46. Are mats issued for class which do not have desks?   Yes/No

47. If no, mention the provision adopted:

   a) Have students to bring mats?   Yes/No

   b) Any other provision adopted

   - - - - - - - - - - -

VII.   SCHOOL RECORDS

45.   Does the institution has

a)   Register & admission and withdrawal
of students?   Yes/No

b)   Attendance register

a)   of teachers   Yes/No

b)   of classes   Yes/No

c)   diary of work done in meetings and
class activities   Yes/No

d)   ....
....   Yes/No

e)   .... current educational ....   Yes/No

f)   copy .... all
including examination?   Yes/No

g)   ....
......ts?   Yes/No

h)   punishment book.   Yes/No

i)   accounts book   Yes/No

j)   file for.
each students   Yes/No

k)   file for reports and ....   Yes/No

49.   Are records full and complete up ....?   Yes/No

50.   Are the store classes checked ....   Yes/No

VIII.   TEACHING AIDS

51.   Are models used as teaching
aids, in your institution?   Yes/No

52.   Does institution has

a)   maps   Yes/No

b)   Charts   Yes/No

c)   Globe   Yes/No

d)   Any other

_____

_ _ _ _ _ _ _ _ _

53.   Are models in working order?   Yes/No

IX.   COCURRICULAR ACTIVITIES

54.   Which of the following cocurricular activities
are organised in your institution?

a) Debate   Yes/No

b) Declamation contest   Yes/No

c) Plays   Yes/No

d) Music competition   Yes/No

e) Poetic competition   Yes/No

f) Drama   Yes/No

g) Music symposium   Yes/No

h) Quiz programme   Yes/No

i) Painting competition   Yes/No

j) Athletics   Yes/No

k) Science fair   Yes/No

55. Does the institution organise the above
    mentioned co-curricular activities.

    a) Weekly   Yes/No

    b) Monthly   Yes/No

    c) Half yearly   Yes/No

    d) On specific days   Yes/No

56. Do the teachers of your institution take
    part in co-curricular activities?   Yes/No

57. Do the students of your institution get rewards
    for participating in cocurricular activities Yes/No

58. Are the rewards to the students in the form
    of

    a) Prizes   Yes/No

    b) Position of honour   Yes/No

59. Does your institution provide library
    facilities to the students for taking part
    in debate, declamations etc.   Yes/No

60. Does your institution celebrate

    a) U.N.O. day   Yes/No

    b) Republic day   Yes/No

    c) Independence day   Yes/No

    d) Teacher day   Yes/No

    e) Children day   Yes/No

f) W.H.O. day   Yes/No

g) Sports day   Yes/No

h) Play day   Yes/No

i) Mother's day   Yes/No

X.   MORAL EDUCATION

61.   Does your institution has provision for
        giving moral education to the students   Yes/No

62.   Is moral education given in.

        a) Morning assembly   Yes/No

        b) Class rooms   Yes/No

        c) General meetings   Yes/No

        d) Class meetings   Yes/No

63.   Is moral education given by

        a) Head of the institution   Yes/No

        b) Teachers in rotation   Yes/No

        c) By outsiders   Yes/No

64.   Does students participate in moral
        education lessons?   Yes/No

65.   Is moral education given in your
        institution effective   Yes/No

APPENDIX - C

NCERT RESEARCH PROJECT

SCHEDULE

Principal Investigator.

Dr.S.M.Gupta,
Department of Education,
Kurukshetra University,
Kurukshetra.

Co-investigator.

Dr.Lokesh . Verma,
P.G.Department of Education,
University of Jammu,
Jammu.

Dear Sir/Madam,

I am working in a NCERT research project entitled "Significant Correlates of J&K high schools showing consistently above and below average results at the board examination for the last five years'. You are requested to fill up the appended pages and oblige. This information will be used for research purposes only.

I shall be grateful to you for this kind favour.

Thanks,

Yours faithfully,

(RENU SAWHNEY)
Junior Research Fellow

Name_____

Total Experience: _____

Name of the Institution _____

Qualification_____

Experience in this institution__ _____

— . —

1. Do you make your ideas clear to the staff?   Yes/

2. Do you discuss new ideas with the staff?   Yes/N

3. Do you ask the staff members to follow
   standard rules and regulations?   Yes/N

4. Do you maintain definite standard of
   performance?   Yes/N

5. Do you see that your staff members are
   working upto their full capacity?   Yes/N

6. Do you assign particular task to a particular
   staff member?   Yes/N

7. Do you make personal favour to any of the
   staff member?   Yes/N

8. Do you find time to listen patiently the
   problems of the individual staff?   Yes/

9. If yes, do you take some personal interest
   in the problems of individual staff?   Yes/N

10 Do you help your staff members to settle
   minor differences?   Yes/N

11 Do you work without consulting your staff
   in running the administration of your
   institution?   Yes/N

12 Do you make all class scheduling decision
   yourself?   Yes/N

13 Do you make sure that your part in the
   organisation of your institution is
   understood by all your staff members.   Yes/N

14 Do you contact teachers of your institution
   daily?   Yes/N

15 Is communication between you and teachers open?   Yes/N

16 Are you consistently humble in dealing with
   teachers and students?   Yes/N

17. Are you enthusiastic in informing your staff,
    the policies and regulations of the social
    system?   Yes/N

18. Do you put suggestions in operation put by your staff members?   Yes/No

19. Do you welcome students view in the staff meetings?   Yes/No

20. Are you respectful of the dignity of others?   Yes/No

21. Do you make provisions for improving staff competencies?   Yes/No

22. Do you encourage your staff members to harm?   Yes/No

23. Do you encourage teachers of your institution to develop taste in refresher courses and teachings?   Yes/No

24. Do you criticise poor work of teachers?   Yes/No

25. Do you explain reasons for criticising the teachers?   Yes/No

26. Do you criticise poor work of students?   Yes/No

27. Do you explain reasons for criticising the students?   Yes/No

28. Do you use constructive criticism?   Yes/No

29. Do you inspect the institution?   Yes/No

30. Do you organise faculty meetings?   Yes/No

31. Do you yourself maintain the school records regularly?   Yes/No

32. If no, are school records maintained by the clerk?   Yes/No

33. Do you send budget proposals to government or any other agency regularly?   Yes/No

34. Are you satisfied with provisions for budgeting?   Yes/No

35. Do you yourself check the budget of institution regularly?   Yes/No

36. Does the institution utilize funds given by Government properly?   Yes/No

37. Do you yourself prepare the estimates of expenditure for coming calender year?   Yes/No

38. Do you invite the parents of students in the institution?   Yes/No

39. How much grant do you get from Government per year? _____

40. What is the revenue of school per year? _____

41. How much amount is being actually spent in school for building, library, laboratory etc. _____

NCERT RESEARCH PROJECT

QUESTIONNAIRE

Principal Investigator,
Dr.S.P.Gupta,
Department of Education,
Kurukshetra University,
Kurukshetra.

Co-Investigator.
Dr.Lokesh K. Verma,
P.G.Department of Education,
University of Jammu,
Jammu.

Name_____   Designation_____

Experience of stay   Total Experience_____
in present

Institution_____   Locality_____

Name of the Institution_____

INSTRUCTIONS

This work is based on a NCERT research project. You are supplied with a questionnaire which contains 15 items. You are requested to go through each item carefully and review as to which factors affect the matriculation result more. You are further requested to rank the five most important factors in order of preferences. Give 5th rank to the factor to which you consider most important in influencing the consistency of result. Likewise, place 4,3,2 and 1 rank to the other factors followed by the first.

Your responses will be kept confidential and your cooperation in this regard will be acknowledged.

Yours faithfully,

(RENU SAWHNEY)
Junior Research Fellow

Sr.No.	Statement	Factor
1.	Teachers Qualification	A
2.	Teachers General Ability	B
3.	Teachers Fund of Knowledge	C
4.	Teachers Expression	D
5.	Teachers style of Dealing with Child	E
6.	Seriousness among Students	F
7.	Students of Educated Parents	G
8.	Students belonging to Rich Families	H
9.	Ability of Students	I
10	Institutional Environment	J
11	Effective Leadership of Principal/ Headmaster	K
12	Locality of School	L
13	Economic Conditions of School	M
14	Building	N
15	Equipment	O

General Teaching Competency Scale

By
Passi & Lalita

Name of the Teacher_____

Class to be taught _____

Topic_____

Date_____Time Duration_____

	Not at all						Very Much
	1	2	3	4	5	6	7

PLANNING (Pre-instructional)

1. Objectives of the lesson were appropriate: clearly stated relevant to the content, adequate and attainable.

2. Content selected was appropriate. relevant and adequate with respect to the objectives of the lesson, and accurate

3. Content selected was properly organized. Logical continuity and phychological organization

4. Audio-visual material chosen were appropriate. suited to the pupils and content, adequate and necessary for attaining the objectives.

PRESENTATION (Instructional)

5. Lesson was introduced effectively and pupils were made ready emotionally and from knowledge point of view to receive the new lesson. continuity in statements or questions, relevance, use of previous knowledge and use of appropriate device/technique

		Not at all						Very much
		1	2	3	4	5	6	7

6. Questions were appropriate.well structured, properly put, adequate in number and made pupils participate.

    · · · · · · ·

7. Critical awareness was brought about in pupils with the help of probing questions prompting, seeking further information, refocusing, redirection and increasing critical awareness.

    · · · · · · ·

8. Concepts and principles were explained (understanding brought about).with the help of clear, interrelated and meaningful statements: statements to create set, to conclude, statements which had relevancy, continuity appropriate vocabulary explaining links, fluency and had no vague words and phrases.

    · · · · · · ·

9. The concepts and principles were illustrated with the help of appropriate examples through appropriate media(verbal and nonverbal): simple, relevant to the content and interest level of pupils.

    · · · · · · ·

10 Pupils' attention was secured and maintained by varying stimuli like movements, gestures, changing speech pattern, focusing, changing interaction styles, pausing, and oral-visual switching: Pupils' postures, and listening, observing and responding behaviour of pupils.

    · · · · · · ·

11 Deliberate silence and nonverbal cues were used to increase pupil participation.

    · · · · · · ·

		Not at all						Very much
		1	2	3	4	5	6	7

12   Pupils' participation(responding
and initiating) was encouraged
using verbal and nonverbal in
reinforces.   .   .   .   .

13   Speed of presentation of ideas
was appropriate. matched with
the rate of pupils' under-
standing and there was proper
budgeting of time.   .   .   .   .

14. Pupils participated in the
class-room and responded to the
teacher and initiated by giving
their own ideas and reacting
to others' ideas.   .   .   .   .

15.   The blackboard work was good:
legible neat, appropriateness
of the content written and
adequate.   .   .   .   .

CLOSING

16.   The closure was achieved
appropriately. main points of
the lesson were consolidated,
present knowledge was linked
with the past knowledge,
opportunities were provided for
applying present knowledge, and
present knowledge and linked
with future learning(assignment)   .   .   .   .

17.   The assignment given to the
pupils was appropriate. suited
to the content taught, and
adequate.   .   .   .   .

EVALUATION

18.   Pupils' progress towards the
objectives of the lesson was checked
and the procedures of evaluation
were appropriate. relevant to the
objectives, valid, reliable
and objective.   .   .   .   .

	Not at all						Very much
	1	2	3.	4	5	6	7

19. Pupils' difficulties in under-
    standing a concept or principle
    were diagnosed by step-by-
    step questioning and suitable   .   .   .   .
    remedial measures were undertaken.

MANAGERIAL

20. Both attending and nonattending
    behaviours of the pupils were
    recognized. attending behaviour
    was rewarded, directions wer.
    given to eliminate nonattending
    behaviour, questions wert asked
    to check pupils' attending
    behaviour, pupils' attending
    behaviour, pupils' feelings and
    ideas were accepted, and non-
    verbal cues were used to
    recognize pupils' attending and
    nonattending behaviours.   .   .   .   .

21. Classroom discipline was maintained
    in the class. pupils' followed
    teacher's instructions that were
    not related to the content.   .   .   .   .

        Comments (if any).

                    -.-

APPENDIX - F

NCERT   RESEARCH   PROJECT

PANDEY'S TEACHER ADJUSTMENT INVENTORY

Principal Investigator:

Dr. J.M.Gupta,
Department of Education,
Kurukshetra University,
kurukshetra.

Co-investigator:

Dr.Lokesh K. Verma,
P.G.Department of Education
University of Jammu,
Jammu.

Dear Sir/Madam,

        1 am working in a NCERT research project entitled
"Significant Correlates of J&K high schools showing
consistently above and below average results at the board
examination for the last five years". You are requested
to fill up the appended pages and oblige. This information
will be used for research purposes only.

        I shall be grateful to you for this kind favour.

        Thanks,

                                        Yours faithfully,

                                        (RENU SAWHNEY)
                                        Junior Research Fellow

PANDEY'S TEACHER ADJUSTMENT INVENTORY

1. Name_____

2. Qualification_____

3. Pay_____

4. Grade_____

5. Experience_____

6. Locality-Rural/Urban_____

7. Since when you are working
    in the present School_____

8. What percentage of results you
    have shown in this School_____

9. Which class you are teaching___ _____

भाग – अ

1. क्या आप का स्वास्थ्य ऐसा है कि आप को उस का पर्याप्त
    ध्यान रखकर काम करना पड़ता है ?   हां/नहीं

2. क्या आप कार्य करने की क्षमता में कुछ कमी का अनुभव करते हैं ?   हां/नहीं

3. क्या आप दूसरों को स्वस्थ देखकर अपने स्वास्थ्य के विषय में
    सोचने लगते हैं ?   हां/नहीं

4. क्या आप प्रातः उठने पर अक्सर थकान का अनुभव करते हैं ?   हां/नहीं

5. क्या आप प्रायः बीमार रहते हैं ?   हां/नहीं

6. क्या सिर में अक्सर चक्कर आने के कारण आप अपने कार्य को
    बीच में रोक देते हैं ?   हां/नहीं

7. क्या प्रतिदिन के कार्य को आप अच्छे ढंग से करने में कुछ
    कठिनाई का अनुभव करते हैं ?   हां/नहीं

8. क्या किसी कार्य को आरम्भ करते ही आपके हृदय में धड़कन
    शुरू होती है?   हां/नहीं

9. क्या आपको भविष्य में बीमारी की शंका प्रायः रहती है ?   हां/नहीं

10. क्या आपको थोड़ी तबीयत खराब होने पर बड़ी बीमारी का
    भ्रम होने लगता है ?

11. क्या आपको जुकाम हो जाने का संदेह अक्सर हो जाया करता है ?   हां/नहीं

12. क्या गर्मी में लू लगने के डर से आप बाहर निकलने से घबड़ाते हैं ?　　हाँ/नहीं

13. क्या आप को किसी रोग की चर्चा सुनने तथा उसके विषय में
पढ़ने से उस रोग के हो जाने का संदेह हो जाता है ।　　हाँ/नहीं

14. क्या आप अनुभव करते हैं कि आपको भोजन ठीक से नहीं
पचता ?　　हाँ/नहीं

15. क्या आपको अपनी स्मरण शक्ति पर पूर्ण भरोसा रहता है ?　　हाँ/नहीं

16. क्या ऋतु परिवर्तन का प्रभाव आपके स्वास्थ्य पर शीघ्र पड़ जाता
है ?　　हाँ/नहीं

17. क्या बीमारी में डाक्टर को देखते ही आपमें कुछ घबड़ाहट होने
लगती है ?　　हाँ/नहीं

18. क्या आप किसी भी समस्या का सुलझाने में कुछ कठिनाई का
अनुभव करते हैं?　　हाँ/नहीं

19. क्या आपको बस या रेलगाड़ी में यात्रा करने में डर लगता है ?　　हाँ/नहीं

20. क्या आपके शरीर का वजन धीरे-धीरे कम होता जा रहा है ?　　हाँ/नहीं

21. क्या आप कुछ समय के लिए किसी स्थान पर जाने के पूर्व सोचने
लगते हैं कि कहीं वहां बीमार न पड़ जायं ?　　हाँ/नहीं

22. क्या आप अनुभव करते हैं कि छोटी-छोटी बातों पर क्रोध
दिखाने का बुरा प्रभाव आप के स्वास्थ्य पर पड़ रहा है ?　　हाँ/नहीं

23. क्या आप पेट की बीमारी के डर से अच्छी से अच्छी चीज खाने
में हिचकचाते हैं ?　　हाँ/नहीं

24. क्या आपको फेफड़े की बीमारी का डर है ?　　हाँ/नहीं

25. क्या आपके नेत्र से पानी प्रायः बहता है ?　　हाँ/नहीं

26. क्या छोटी सी कठिनाई उपस्थित हो जाने से आप प्रायः निराश
हो जाते हैं ?　　हाँ/नहीं

27. क्या आप को छूत की बीमारी जल्द लग जाती है ?　　हाँ/नहीं

28. क्या आप का गला प्रायः सूखा रहता है ?　　हाँ/नहीं

29. क्या आप प्राय: मूर्ती का अनुभव करते हैं ?   हां/न

30. क्या आप को नाक मे सांस लेने में प्राय: कठिनाई होती है ?   हां/न

वर्ग ।व।

1. क्या आपकी बीमारी में आग के साथी आपको देखने कम आते हैं ?   हां/न

2. क्या आप को अपने घरेलू जीवन को सुधारने के लिए काफी प्रयत्न
   करना पड़ता है ?   हां/न

3. क्या आप अनुभव करते हैं कि दूसरे लोग आप पर कम विश्वास
   करते हैं ?   हां/नहीं

4. क्या वे लोग जिन का उत्तरदायित्व आप पर है आप की अवज्ञा
   करते हैं ?   हां/नहीं

5. क्या आप को विश्वास है कि आप के परिवार के लोग आपके
   व्यवहार में संतुष्ट रहते हैं ?   ं/नहीं

6. क्या आप अनुभव करते हैं कि दूसरे लोगों के प्रति आप के
   प्रेमपूर्व व्यवहार को देखकर परिवार के लोग कुछ असंतुष्ट रहते हैं ?   हां/न

7. क्या आपके परिवार के लोग आप के व्यवहार को ठीक से न
   समझ पाने के कारण आप को कभी कभी कठिनाई में डाल देते हैं ?   हां/नह

8. क्या आप परिवार के लोगों को उतने अच्छे ढंग से नहीं रखते
   जितना चाहिए ?   हां/नहीं

9. क्या पारिवारिक उलझनों के कारण आप को अध्ययन के लिए कम
   समय मिलता है ?   हां/नहीं

10. क्या आप अनुभव करते हैं कि परिवार के कई लोगों की शिक्षा
    का स्तर संतोषजनक नहीं है ?   हां/नहीं

11. क्या आप अपनी बातों को दूसरों के भाषा कहने में कुछ
    झिझकते हैं ?   हां/नहीं

12. क्या आप अनुभव करते हैं कि आप के अच्छे कार्यों की भी
    सराहना दूसरे नहीं करते ?   हां/नहीं

13. यदि आप घर पर किसी को आमन्त्रित करते हैं तो क्या
    उनका सत्कार उचित ढंग से हो पाता है ?   हां/नहीं

14. क्या आप अनुभव करते हैं कि परिवार के बीमार लोगों
    की सेवा उचित ढंग से नहीं हो पा रही ?   हां/नहीं

15. क्या आप अनुभव करते हैं कि पारिवारिक झमेले में आप
    इतने उलझे रहते हैं कि दूसरों के हित के विषय में सोचने
    का अवसर ही नहीं मिलता है ?   हां/नहीं

16. क्या आप सामाजिक उत्सवों में सम्मिलित हो कर भी
    अकेलेपन का अनुभव करते हैं ?   हां/नहीं

17. क्या आप एक व्यक्ति की कही बात को दूसरे से अक्सर
    कहते हैं ?   हां/नहीं

18. क्या आप परिवार के कुछ लोगों की कुछ आदतों को
    देखकर प्रायः क्रोध दिखाया करते हैं ?   हां/नहीं

19. क्या आप अनुभव करते हैं कि परिवार के अन्य लोग आपको
    विशेष परवाह नहीं करते हैं ?   हां/नहीं

20. क्या आप अनुभव करते हैं कि सामाजिक उत्सवों में आपको
    आदर मिलता है ?   हां/नहीं

21. क्या आप अनुभव करते हैं कि परिवार के लोग कभी कभी
    आपकी उन्नति के मार्ग में बाधक बन जाते हैं ?   हां/नहीं

22. क्या आप दूसरे के मजाक को ठीक समझ पाते हैं ?   हां/नहीं

23. क्या दूसरों की उन्नति देखकर आप अपने विषय में सोचने
    लगते हैं ?   हां/नहीं

24. क्या आप अकेले रहने में अधिक सुख का अनुभव करते हैं ?   हां/नहीं

25. क्या आप दूसरों से कभी कभी ऐसी बातें कह जाते हैं कि
    स्वयं कठिनाई में पड़ जाते हैं ?   हां/नहीं

26. क्या आप को अपरिचितों से बातचीत करने में झिझक होती है ?   हां/नहीं

27. क्या आप दूसरों की कठिनाईयों में उचित सहायता देते हैं ?   हां/नहीं

28. क्या आप कभी कभी दूसरों के प्रति ऐसे कार्य कर जाते हैं जिन के लिए बाद में पछताना पड़ता है ? हां/नहीं

29. क्या आप प्रायः आप में रूष्ट हो जाते हैं ? हां/नहीं

30. क्या सामाजिक अवसरों में दूसरों को हंसते देख कर आप कारण जानने की कोशिश करते हैं ? हां/नहीं

वर्ग 3म१

1. क्या आप की आय एसी है कि उसे ध्यान में रखकर आप को कार्य करना पड़ता है ? हां/नहीं

2. क्या आप को आर्थिक कारणों से त्याग अधिक करना पड़ता है ? हां/नहीं

3. क्या आप दूसरों को अच्छा कपड़ा पहने देखकर उसी प्रकार के कपड़ों की इच्छा करते हैं ? हां/नहीं

4. क्या आप अनुभव करते हैं कि आप की आर्थिक स्थिति आपके कार्य में बाधक है ? हां/नहीं

5. क्या आप अनुभव करते हैं कि वेतन की कमी के कारण आप अध्ययन कार्य को उतनी कुशलतापूर्वक नहीं कर पा रहे हैं जितनी चाहिए ? हां/नहीं

6. क्या धनी लोगों को देखने में आपका संकोच होता है ? हां/नहीं

7. क्या वाहन न होने के कारण आप विद्यालय घर से पैदल जाते हैं ? हां/नहीं

8. क्या इच्छा होते हुए भी आप सिनेमा कम देखते हैं ? हां/नहीं

9. क्या आप बच्चों को विद्यालय जाते समय दोपहर के नाश्ते के लिए उचित प्रबन्ध करते हैं ? हां/नहीं

10. क्या आप बच्चों से घर पर पढ़ाई के अतिरिक्त घरेलू काम लेते हैं ? हां/नहीं

11. क्या अनुभव करते हैं कि सामाजिक उत्सवों पर उचित खर्च नहीं कर पाते ? हां/नहीं

12. क्या आप यह सोचा करते हैं कि दूसरे आप से अधिक सम्पन्न हैं ? हां/नहीं

13. क्या अनुभव करते हैं कि आर्थिक संकट के कारण आप ना
    अधिक समय अध्ययन में नहीं दे पाते ?   हाँ/न

14. क्या आप को प्रति माह दुकानदारों से सामान उधार
    लेना पड़ता है ?   हाँ/न

15. क्या आपके हर माह के आरम्भ में ही यह चिन्ता हो जाती
    है कि पूरे माह का खर्च कैसे चलेगा ?   हाँ/न.

16. क्या आप अनुभव करते हैं कि आप उतना उचित ढंग से खर्च नहीं
    करते जितना करना चाहिए ।   हाँ/नहीं

17. क्या आप अनुभव करते हैं कि अधाभाव के कारण आप
    आवश्यक पुस्तकों को भी नहीं खरीद सकते ?   हाँ/नहीं

18. क्या आप दूसरे विभागों के वेतन भोगी व्यक्तियों को
    विशेष सुखी समझते हैं ?   हाँ/नहीं

19. क्या आप अनुभव करते हैं कि कुछ लोग आप को आर्थिक
    कष्ट में देखकर खुश होते हैं ।   हाँ/नहीं

20. क्या आप अनुभव करते हैं कि आप के पास वे भी वस्तुएं नहीं
    हैं जो एक अध्यापक के लिए आवश्यक हैं ।   हाँ/नह

21. क्या आप में हमेशा अधिक धन कमाने की इच्छा रहती है?   हाँ/न

22. क्या आप प्रायः यह सोचते हैं कि आपका वृद्धापन ठीक ढंग
    से नहीं निकलेगा ?   हाँ/नह

23. क्या अधाभाव के कारण आप अपने परिवार के भविष्य के बारे
    में अधिक चिन्तत रहते हैं ?   हाँ/न

24. क्या आप धन को आदर्श जीवन का एक मात्र साधन मानते हैं ?   हाँ/नहीं

25. क्या आप अनुभव करते हैं कि अधाभाव के कारण आप दूसरों
    का सत्कार ठीक से अपने घर पर नहीं कर पाते ?   हाँ/नहीं

26. क्या आप बच्चों के लिए आवश्यक खेल सामग्रियां उपलब्ध कर
    पाते हैं ?   हाँ/नह

27. क्या आप कभी-कभी अपनी आर्थिक स्थिति से दुखी हो कर
    आने को ही सोचते हैं ?   हाँ/न

28. क्या दूसरों के मांगने पर प्रायः आप बड़ कठिनाई में पड़ जाते हैं कि कैसे मंतुष्ट किया जाए ? हां/नहीं

29. क्या आप अनुभव करते हैं कि तंगार पड़ने पर अर्थाभाव के कारण उचित उपाय नहीं कर पाते ? हां/नहीं

30. क्या आप परिवार के लिए स्वास्थ्य प्रद भोजन सामग्री का प्रबन्ध करने में कठिनाई का अनुभव करते हैं ? हां/नहीं

वर्ग [ट]

1. क्या आप अनुभव करते हैं कि शिक्षा का प्रतिपादन आप के मन के अनुकूल नहीं हो पाता ? हां/नहीं

2. क्या किसी विद्यार्थी को डांटकर आपको संदेह होता है कि कहीं आप उसके दास्य नहीं है ? हां/नहीं

3. क्या आप सोचते हैं कि आपकी आवाज नितान्त पीछे बैठे विद्यार्थियों तक ठीक से नहीं पहुंच पाती । हां/नहीं

4. क्या प्रधानाध्यापक अक्सर आप से अप्रसन्न रहते हैं ? हां/नहीं

5. क्या प्रधानाध्यापक आपकी अनुचित आलोचना प्रायः करते रहते हैं ? हां/नहीं

6. क्या कक्षा में बालकों को आप पढ़ाये हुए पाठ पर विचार व्यक्त करने का पूर्ण अवसर देते हैं ? हां/नहीं

7. क्या आप अनुभव करते हैं कि प्रधानाध्यापक आप की शिकायत कभी-कभी अन्य अधिकारियों से भी किया करते हैं ? हां/नहीं

8. क्या आप अधिकारियों की गुप्त रिपोर्ट से कुछ शंकित रहते हैं ? हां/नहीं

9. क्या कक्षा में पढ़ाते समय आपको प्रायः थकान का अनुभव होता है ? हां/नहीं

10. क्या कक्षा में प्रवेश करते ही कभी-कभी बिना कारण आपको घबराहट आ जाती है ? हां/नहीं

11. क्या पढ़ाते समय बीच-बीच में आप कभी कुछ उद्विग्न हो जाते हैं ? हां/नहीं

12. क्या कक्षा में विद्यार्थी कभी-कभी बिना कारण शोर करने लगते हैं ? हां/नहीं

13. क्या कक्षा में पढ़ाते समय आप बालकों को अधिक निर्देश दिया करते हैं ? हां/नहीं

14. क्या आप विधालय में उत्सवों में अधिकतर भाग लेते हैं ?   हां/नहीं

15. क्या आप अनुभव करते हैं कि दूसरे लोग आपकी योग्यता का
    ठीक से आदर नहीं करते ?   हां/नहीं

16. क्या आप अनुभव करते हैं कि कुछ अनुयायक अधिक प्रभावशाली
    स्थानों की स्थापन्ती को प्रोत्साहित करते हैं ?   हां/नहीं

17. क्या आप अनुभव करते हैं कि विधालय में कम योग्यता वाले
    अध्यापक अधिकारियों के विशेष कृपा पात्र हैं ?   हां/नहीं

18. क्या आपको वार्षिक वेतन वृद्धि मिलती है ?   हां/नहीं

19. क्या आप और विधालय के किसी अन्य कर्मचारी में विवाद
    पैदा होने पर अधिकारियों द्वारा पक्षपात किया जाने का
    आपको संदेह हो जाता है ?   हां/नहीं

20. क्या विधालय में व्याप्त वर्गवाद, जातिवाद, धर्मवाद में फंस
    जाने का भय आपको प्रायः रहता है ?   हां/नहीं

21. यदि कुछ लड़के एक साथ बात करते दिखाई पडते हैं तो क्या आप
    को संदेह हो जाता है कि वे कोई षडयन्त्र रच रहें हैं ?   हां/नहीं

22. पाठ्यक्रम के नये परिवर्तनों में क्या आप कुछ उत्तिग्न हो जाते हैं? हां/नहीं

23. क्या आप पढ़ाते समय बालकों द्वारा पूछे हुए प्रश्नों का उत्तर
    देना प्रायः उचित मानते हैं ?   हां/नहीं

24. क्या कक्षा में प्रवेश के पूर्व विषय की तैयारी पर आप पुनः
    विचार प्रायः करने लगते हैं ?   हां/नहीं

25. क्या विधालय में उत्सवों पर भाषण देने में आप घबराते हैं ?   हां/नहीं

26. क्या आप अधिकारियों को प्रत्युत्तर न देकर चात को मन ही
    में लिए रहते हैं ?   हां/नहीं

27. क्या पढ़ाने के लिए कक्षा में पहुंचने के लिए आप को कभी कभी
    देर हो जाया करती है ?   हां/नहीं

28. क्या आप प्रायः अधिकारियों की निगाह बचाकर काम करते हैं? हां/नहीं

29. क्या आप अनुभव करते हैं कि आपके कुछ सहयोगी विधार्थि में
    आपके विषय में प्रायः बात करते हैं ?   हां/नहीं

30. क्या विधार्थियों द्वारा पूछे गये प्रश्न पर आप सोचने लगते हैं कि
    वे आपके ज्ञान की परीधा कर रहें हैं ?   हां/नहीं

वर्ग ईई

1. क्या आप किसी कार्य के परिणाम पर विचार करना आवश्यक समझते हैं ? हाँ/नहीं

2. क्या आप अनुभव करते हैं कि मनुष्य को प्रत्येक स्थिति में मूल्यनिष्ठ होना आवश्यक नहीं है ? हाँ/नहीं

3. क्या आप धैर्य और परिश्रमशीलता की कमी के कारण प्राय: काम करने में कठिनाई का अनुभव करते हैं ? हाँ/नहीं

4. क्या आप अनुभव करते हैं कि आप द्वारा प्रदत्त आदर्शों को विद्यार्थी उतना नहीं ग्रहण करते जितना आप चाहते हैं ? हाँ/नहीं

5. क्या आप प्राय: सांस्कृतिक मूल्यों को आधार मानकर काम करते हैं ? हाँ/नहीं

6. क्या आप अनुभव करते हैं कि मनुष्य का जीवन आदर्श कभी कभी उसे प्रतिकूल परिणाम की ओर ले जाता है ? हाँ/नहीं

7. क्या आप अनुभव करते हैं कि नैतिक मूल्यों का आधार मानकर कार्य करने में अधिक सफलता प्राप्त होती है ? हाँ/नहीं

8. क्या आप नैतिक मूल्यों को ग्रहण करने की शिक्षा बालकों को प्राय: देते हैं ? हाँ/नहीं

9. क्या आप अनुभव करते हैं कि दृढ़ विचार रखने से मनुष्य प्राय: कठिनाई में पड़ जाते हैं ? हाँ/नहीं

10. क्या आप अनुभव करते हैं कि हानि उठाकर भी परोपकार करना वांछनीय है ? हाँ/नहीं

11. क्या आपका विचार है कि विद्यार्थी गुरू को अपना आदर्श मान कर कार्य करें ? हाँ/नहीं

12. क्या आप अनुभव करते हैं बिना गुरू के विद्यार्थी नैतिकता की उपलब्धि नहीं कर सकता ? हाँ/नहीं

13. क्या आप अनुभव करते हैं कि शिक्षक का आचरण नैतिक प्रधान होना वांछनीय है ? हाँ/नहीं

14. क्या आप जानते हैं कि जीवन के क्रिया कलाप सा उद्देश्य होते हैं? हाँ/नहीं

15. क्या आप का विश्वास है कि कठिनाईयों में मनुष्य को नैतिक मूल्यों का त्याग करना अवांछनीय नहीं है ? हाँ/नहीं

16. क्या आप अपने सहयोगियों से आशा करते हैं कि वे आप ... हां/
    ... भारण करें ?

17. क्या आप यह विचार है कि माता-पिता के अप्रिय कार्य- हां/
    कलाप पर भी उनका सम्मान करना वांछनीय है ?

18. क्या आपका विचार है कि ... में असत्य बोलना बुरा नहीं है? हां/

19. क्या अधिकारियों की ओर से दबाव पड़ने पर भी आप सत्य हां/
    के कहने से भयभीत नहीं होते ?

20. क्या आप अधिकारियों को नैतिक गल्तियों के विषय में निर्भीक हां/
    देना वेकार समझते हैं ?

21. क्या झूठ बोलने वाले व्यक्तियों को भी आप कभी-कभी पसन्द हां/
    करते हैं ?

22. क्या आप अनुभव करते हैं कि मानव ही ... मनुष्य का एक हां/
    पात्र धर्म है ?

23. क्या आप अनुभव करते हैं कि दूसरों के भला के लिए अपने सुखों हां/
    का त्याग करना वांछनीय है ?

24. क्या आप अनुभव करते हैं कि भूखी अवस्था में दिखलाई पड़ने वाले हां/
    व्यक्ति दया के पात्र हैं ?

25. क्या आप अनुभव करते हैं कि कठिन परिस्थितियों में व्यक्ति का हां/
    दूसरों के प्रति दयापूर्ण व्यवहार ... है ?

26. क्या आप विद्यार्थियों का अध्यापक के प्रति आदर भाव न हां/
    दिखाना उचित समझते हैं ?

27. क्या आप किसी विद्यार्थी द्वारा चुराई गई छोटी वस्तुओं हां/
    की शिकायत होने पर ध्यान नहीं देते ?

28. क्या आप अनुभव करते हैं कि दूसरों की बुराई करने में ही हां/
    अधिकारियों की कृपा प्राप्त होती है ?

29. क्या आप किसी महा पुरुष के जीवन-आदर्श को लक्ष्य मानकर हां/
    काम करते हैं ?

30. क्या आप अध्ययन तथा अध्यापन में जीवन की गहराई को ही हां/
    हल करने का प्रयत्न करते हैं ?